

# Guide to Applying for an Environmental Compliance Approval

[ontario.ca/environment](http://ontario.ca/environment)



# MINISTRY OF THE ENVIRONMENT

## Guide to Applying for an Environmental Compliance Approval

### This is a guide for persons applying for an Environmental Compliance Approval.

Activities regulated under the Environmental Protection Act, R.S.O 1990, Chapter E.19, and the Ontario Water Resources Act, R.S.O 1990, Chapter O.40, must be carried out in accordance with those Acts, the applicable regulations and the guidelines administered by the ministry. In many cases that will require the obtaining of an approval under Part II.1 of the Environmental Protection Act (EPA). The ministry updates these requirements from time to time, as the environmental standards and environmental management approaches evolve and develop.

This guide sets out application requirements for obtaining an Environmental Compliance Approval (ECA). The ministry updates this guide regularly to ensure that it provides accurate information and guidance for those submitting an ECA Application. All website addresses referred to in this guide were current at the time of release.

While the ministry makes every effort to ensure the accuracy of the information in this guide, readers should not take any of the information in this guide as legal advice.

You can find the most current version of this guide on the ministry's website at: [www.ene.gov.on.ca/en/publications/forms/index.php](http://www.ene.gov.on.ca/en/publications/forms/index.php). Alternatively, for a copy contact:

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### Smart Features:

These active buttons appear here to provide additional support. Click on these hyperlinks to open a new document or take you to a section of the guide or the internet.



Application Form Button will link you to the ECA Application Form.



Pre-Application Considerations Button will take you to the ECA Pre-Application Considerations checklist.



**Contents of this Guide Button** will link you to the Contents page of this guide.

Underlined text link will take you to a section of this guide or an e-mail address or to the internet. a

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# a About this Guide and the ECA approval process

## This part of the guide:

- explains the purpose and context of this guide,
- explains the relationship between this guide, the legislation and regulations,
- provides background regarding how this guide was developed,
- explains the complete Environmental Compliance Approval (ECA) Application concept, and
- provides important information and instructions for anyone applying for an Environmental Compliance Approval.

## Purpose of the Guide

The Ministry of the Environment (ministry) developed this guide to help persons (applicants) who are filling out the Environmental Compliance Approval Application Form (ECA Application Form).

**TIP:** Legislation can be accessed online at [www.e-laws.gov.on.ca](http://www.e-laws.gov.on.ca) or contact ServiceOntario by telephone at 416-326-5300 (Toll-free at 1-800-668-9938) or by e-mail: [e-laws@ontario.ca](mailto:e-laws@ontario.ca)

The guide is divided into six parts:

- **Part A** contains general background information, including information about: this guide, the ministry's modernization of the approval process and an overview of the ECA application process.
- **Parts B and C** relate specifically to sections of the ECA Application Form:
  - **Part B** covers Sections 1-5 of the form. Sections 1-5 require applicants to provide certain general information about themselves and their project. For example, applicant information, project information, regulatory

requirements generally applicable to proposals, site information, facility information.

- **Part C** covers Section 6 of the form. Section 6 sets out the technical information and supporting documents that must be included with different types of projects.
- **Part D** provides information specifically about ECAs with Limited Operational Flexibility.
- **Part E** describes non-standard cases, such as Transfer of Review, Approvals in Principle Subject to Final Plans and Specifications and Municipal Waste Pilot Projects.
- **Part F** is a **Glossary, List of Abbreviations** and **Appendix**
  - **Appendix 1** provides examples of typical sewage works projects and discusses whether they qualify for Limited Operational Flexibility.
  - **Appendix 2** provides sample project description for the Application Summary Section.
  - **Appendix 3** lists the municipalities that currently participate in the Transfer of Review Program.
  - **Appendix 4** provides examples of typical waste projects and what they may or may not do under Limited Operational Flexibility. (The Environmental Protection Act allows the Director to include terms and conditions in relation to future specified alterations, extensions, enlargements or replacements. The guide refers to such terms and conditions as "Limited Operational Flexibility.")
  - **Appendix 5** checklist is to help you decide whether you should seek a pre-application meeting with the ministry.

This guide replaces the following historic guides:

1. Guide to Applying for Approval (Air and Noise) [PIBS 4174]

2. Guide for Applying for Approval of Sewage Works [PIBS 7339]
3. Guide for Applying for Approval of Waste Disposal Sites [PIBS 4183]
4. Guide for Applying for Approval of a Waste Management System [PIBS 4185]
5. Guide for Applying for Approval of a Waste Management System for Mobile Waste Processing [PIBS 6992]

The technical information that was required with an application for the above-listed approvals was taken from the previous guides and consolidated into this guide. Much of the technical information in this guide is specific to particular types of proposals, that is, sewage works, waste, or discharges to air and can be found in specific sections in this guide. However, where possible, the application requirements have been harmonized across media in this guide to coordinate with the features of the Environmental Compliance Approval.

## Modernizing the Approval Process: The Environmental Compliance Approval

On October 31, 2011, amendments to the EPA and OWRA came into force, creating an instrument of approval to replace Certificates of Approval. This instrument is the Environmental Compliance Approval (ECA). The Director no longer issues Certificates of Approval or provisional certificates of approval under the EPA or approvals under section 53 of the OWRA. However, existing Certificates of Approval, provisional certificates of approval and section 53 OWRA approvals and their terms and conditions will continue to apply and they may be amended, reviewed, suspended or revoked as if they were an ECA. Wherever the term Environmental Compliance Approval is used, it also applies to existing Certificates of Approval, provisional Certificates of Approval and approvals issued under section 53 of the OWRA.

The amended legislation and subsequent regulations brought several other changes to approvals. Many of these are explained throughout this guide and in technical bulletins.

Though the Ministry of the Environment Director's authority to issue ECAs is set out in the EPA, activities that require an ECA or that are exempt are governed by the separate Acts – either the EPA or OWRA and the regulations under those Acts. For example, if you propose to carry on activities that are concerned with sewage (activities that might fall under the OWRA section 53), your determination of whether you need approval for the

activity (or whether it might be exempt) is still governed by the OWRA, but the Director's authority to issue an ECA comes from the EPA.

## The ECA Application

Before the introduction of ECAs, businesses would apply for separate Cs of A for air, noise, waste or sewage projects. Now businesses can apply for an ECA for multiple activities and projects in multiple media. In other words, ECAs offer a one-window, multiple media approach and are required for activities that fall under:

- EPA section 9 (activities that may discharge, or from which may be discharged, a contaminant into the natural environment other than water, which includes most industrial processes or modifications to industrial processes and equipment),
- EPA section 27 (a Waste Management System or Waste Disposal Site), and/or
- OWRA section 53 (sewage works).

The ministry created this guide to help you as you fill out the ECA Application Form and prepare the related documents.

**IMPORTANT:** Note that you will not necessarily need to fill out the entire form or provide all the related documents described in this guide. The specifics of your proposal and your determination of which emissions or media are involved will dictate the part of the form you need to fill out and the documents you will have to provide.

This guide is not intended to help you decide whether you should apply for an ECA, nor does it provide you with legal or technical advice or interpretation of legislation or regulations. The ministry encourages you to seek advice and the services of qualified professionals where needed.

## The Complete Application Requirement

Another important feature of the amendments that introduced ECAs is EPA section 20.14, which provides that the Director is not required to consider an ECA Application if the application does not meet requirements prescribed by regulation. In other words, if your application is incomplete, or if you provide information that does not meet prescribed standards, the Director can return it to you without considering whether to issue or refuse an ECA. Of course, you can always re-apply, but doing so will take time and cause delay to your project or plans.



Ontario Regulation 255/11, *Applications for Environmental Compliance Approvals* made under the EPA (ECA Application Regulation), sets out prescribed requirements for a complete application for an ECA. These minimum requirements allow the ministry to review an ECA Application to decide whether it is complete and therefore whether the Director should proceed to consider the application and make a decision to issue, refuse to issue, or amend an ECA.

These minimum ECA application requirements, which are set out in the ECA Application Regulation, are explained throughout this guide and are highlighted here:

- You must use the correct form and provide all the applicable information requested.
- You must provide a detailed project and process description.
- You must provide a summary project description.
- You must provide information around ownership, land use and zoning, with some exceptions, as noted.
- You must provide a site plan, with some exceptions as noted.
- You must provide a financial assurance calculation and rationale, if it is required for your type of activity, operation, or approval.
- You must provide signatures certifying to the completeness and accuracy of the information.
- Maps, plans and drawings must adhere to minimum information standards, as noted.

**IMPORTANT:** There is a lot of other information explained in this guide, including technical materials that are required for the ministry to do a full review of your application. If these materials are not provided with your application, the review process will be delayed as the ministry contacts you to obtain the information. Further, if the review process is completed based on insufficient information, the Director's decision may be to return an ECA. For more information refer to the checklist for technical requirements for a complete ECA submission on the Ministry's Environmental Compliance Approval information page: [www.ene.gov.on.ca/environment/en/industry/assessment\\_and\\_approvals/environmental\\_approvals/STDPROD\\_097095.html](http://www.ene.gov.on.ca/environment/en/industry/assessment_and_approvals/environmental_approvals/STDPROD_097095.html).

## Other Requirements

It is also important to remember that it is your responsibility to be aware of and to understand, all legal requirements of the EPA, OWRA and other legislation applicable for your proposed project. Note that the Director's issuing of an ECA under one Act does not relieve you from obtaining any other approvals you might need under other Acts or provisions. For example, for a proposal that involves discharge of contaminants into the natural environment under EPA section 9 you might need an ECA and you may also require an approval under the Environmental Assessment Act. Your local ministry district office can help you determine what approvals you might require.

Applicants should refer to the Acts and regulations for a comprehensive review of those requirements. Similarly, applicants should refer to other ministry publications for an in-depth understanding of the ministry's guidelines and procedures.

**TIP:** Ministry publications can be found on the ministry's website in the *resources* section at: [www.ene.gov.on.ca/environment/en/resources/index.htm](http://www.ene.gov.on.ca/environment/en/resources/index.htm) or you can contact the Environmental Approvals Access and Service Integration Branch at 416-314-8001; toll-free at 1-800-461-6290; e-mail [eaabgen.moe@ontario.ca](mailto:eaabgen.moe@ontario.ca) for more information.

## Knowingly Providing False Information

The ministry also reminds applicants that it is an offence under section 184 of the EPA and section 98 of the OWRA to give false or misleading information to the ministry regarding matters under these Acts or the regulations related to them. A conviction for the offence of providing false information may result in a fine, imprisonment or both.

## Historic Certificates of Approval

Any reference in this guide to *Environmental Compliance Approval*, *ECA* or *Approval* should be read as including *Certificate of Approvals*, *C of A*, *Cs of A*, *Provisional Certificates of Approval* and OWRA s. 53 approvals that were issued before EPA Part II.1 came into force.

Note also that this guide incorporates by reference other previously issued guides and forms that may refer to *Certificates of Approval*, *Provisional Certificates of Approval* or *Cs of A* and, unless otherwise specified, you should read any such references

as meaning an ECA. Similarly, *Comprehensive Certificates of Approval* should be read as *Environmental Compliance Approvals with Limited Operational Flexibility*.

## Questions and Answers Related to Applying for an ECA

This section contains useful information for applicants who are new to environmental approvals and for those who have worked with Certificates of Approval but who must now apply under the Environmental Compliance Approval process. The questions are grouped by topic.

### Questions About Using this Guide

1. What is NOT covered in this guide?

### Questions About the ECA Application Process

2. What if I am still not sure if I need an ECA?
3. If I still don't understand how to apply, where can I go for more help?

### Questions About ECAs and a Complete ECA Application

4. What is continuous improvement?
5. What happens if I miss or leave out a requirement in my application?
6. How do I know if I have missed a requirement?
7. What are some of the things that would make an ECA Application of poor quality?

## Questions About Using this Guide

1. **What is NOT covered in this guide?**
  - This guide only covers applications for an ECA for activities involving air and noise emissions, Waste Management Systems, Waste Disposal Sites and Sewage Works.
  - The following topics are not covered:
    - Permits to take water
    - Vertical closed loop ground source heat pumps
    - Drinking water systems and municipal licensing
    - Renewable Energy Approvals
    - Environmental Activity and Sector Registry activities
    - Existing licensing and certification programs such as pesticides and well drillers
    - How to apply for an approval for mobile PCB destruction facilities covered under O. Reg. 352, R.R.O. 1990.

## Questions About the ECA Application Process

### 2. What if I am still not sure if I need an ECA?

- This guide is meant to help you prepare an ECA Application after you have decided to submit one. It is your responsibility to understand what your obligations are and to be familiar with the legislative requirements that apply to your situation. You can get help from your local district office of the ministry. For access to legislation, visit Ontario's e-Laws website at: [www.e-laws.gov.on.ca](http://www.e-laws.gov.on.ca), or contact ServiceOntario by telephone at 416-326-5300 (toll-free at 1-800-668-9938) or by e-mail: [e-laws@ontario.ca](mailto:e-laws@ontario.ca).

### 3. If I still don't understand how to apply, where can I go for more help?

- A client service representative from the ministry will be pleased to help you. Contact them at:

**Ministry of the Environment  
Environmental Approvals Access and Service  
Integration Branch**  
2 St. Clair Avenue West, Floor 12A  
Toronto, Ontario  
M4V 1L5  
Telephone: 416-314-8001  
Toll-free: 1-800-461-6290  
Fax: 416-314-8452  
E-mail: [eaabgen.moe@ontario.ca](mailto:eaabgen.moe@ontario.ca)

- As well, general information on the ECA Program is available on the ministry website. This is the main guide for filling out applications for ECAs, but there are a number of supplemental guides for specific and/or special issues. To determine if there are additional requirements you might have to satisfy with regard to your project, you can review the list of Guidelines on the ministry website.
- You may also want to contact your local ministry district office; you can find a list of offices at: [www.ene.gov.on.ca/environment/en/about/regional\\_district\\_offices/index.htm](http://www.ene.gov.on.ca/environment/en/about/regional_district_offices/index.htm).
- In addition, the ministry has developed examples of high-quality, complete ECA Applications for various activities. The sample application packages include completed applications and all supporting documentation that is required for specific situations. The ministry has developed these examples as a way of establishing

a common expectation for the level of documentation that demonstrates compliance with the ECA application process. Additional technical information and documents may be required for a site-specific situation depending on the nature of the ECA you are seeking. The ministry strongly encourages applicants to review the examples found on the ministry's website at: [www.ene.gov.on.ca/environment/en/industry/assessment\\_and\\_approvals/environmental\\_approvals/STDPROD\\_080622.html](http://www.ene.gov.on.ca/environment/en/industry/assessment_and_approvals/environmental_approvals/STDPROD_080622.html).

## Questions About ECAs and a Complete ECA Application

### 4. What is continuous improvement?

- The ministry has a broad mandate to provide for the protection and conservation of the natural environment of Ontario and ECAs are one way the ministry works to achieve its environmental protection objectives.
- The protocols for updating approvals clearly communicate ministry objectives and process, and provide details on how and when approvals are updated. The following publications provide information about the protocols for updating various approvals:
  - Protocol for Updating Certificates of Approval for Air Emissions [PIBS 5016]
  - Protocol for Updating Approvals for Drinking Water Systems [PIBS 5018]
  - Protocol for Updating Certificates of Approval for Sewage Works [PIBS 5019]
  - Protocol for Updating Certificates of Approval for Waste Management [PIBS 5017]

### 5. What happens if I miss or leave out a requirement in my application?

- If your application is incomplete, the Director may return it to you without making a decision whether to issue your approval. You could re-submit the application, but would be required to start from the beginning of the review process.

### 6. How do I know if I have missed a requirement?

- You would receive communication from ministry staff once they have assessed your application or during their application intake and review process.
- The electronic version of the ECA Application Form will alert you to missing data in the form itself.

### 7. What are some of the things that would make an ECA Application of poor quality?

Examples include:

- Not including design details in plans. (Draft or conceptual plans that do not have sufficient detail to demonstrate compliance with the ministry's requirements are not acceptable; however final 'as built design plans' are unnecessary.)
- Not including reports that are needed.
- Submitting technical reports that are lacking in substantial detail.
- Not including detailed technical information, such as a design report and associated engineering drawings.
- Submitting a technical analysis that is inconclusive, that is, your design and analyses do not show how your proposal is compliant with ministry requirements.
- Submitting a technical report that does not outline site-specific conditions, potential environmental impacts and proposed environmental protection measures to meet current regulatory requirements.
- Incomplete application payment.
- Providing drawings or site specifications that are illegible or difficult to read.
- Not explaining acronyms or terms such that the ministry cannot understand your application.
- Submitting drawings or other information that had to be prepared by someone with specific technical qualifications, for example, a professional engineer or professional geoscientist, without a stamp or signature for certification.
- Not considering noise in your proposal.
- Not including the appropriate rationale for your Financial Assurance estimate.

In general, a high-quality application will be one where the person preparing the application has procedures to identify and mitigate any mistakes, errors or omissions in the supporting documents that are developed. For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

### 8. What if I am applying to install vertical closed loop ground source heat pumps?

Ontario Regulation 98/12 for Ground Source Heat Pumps requires that all vertical closed loop geothermal systems

developed in Ontario obtain an ECA. The regulation allows for a one time multi-site ECA to accommodate multiple drilling sites in the Province of Ontario.

A draft instructions document titled “Instructions for Completing an Application for Environmental Compliance Approval for Vertical Closed Loop Ground Source Heat Pumps” and an application form has been developed specifically for the geothermal industry to provide upfront a high level of clarity and consistency in the requirements of the supporting information for geothermal systems. Further information for Geothermal Energy may be found on the ministry website under Subject Matter. ([www.ene.gov.on.ca/environment/en/subject/geothermal\\_energy/index.htm](http://www.ene.gov.on.ca/environment/en/subject/geothermal_energy/index.htm)) or at the Ministry of the Environment Environmental Approvals Access and Service Integration Branch (contact information indicated above).

## Overview of the ECA Application Process

The ministry receives hundreds of approval applications a month, some of which require considerable time and effort to assess. To facilitate the efficient service, the ministry will assess the completeness of each ECA application and incomplete applications may be returned without making a decision regarding whether to issue an ECA. If the Director returns your application because it is incomplete, you will lose valuable time because to re-submit, you will have to start the application process from the beginning.

This section provides an overview of the process from pre-application to Director’s decision. The figure on the following page shows how ECA Applications make their way through the ministry for review.

## Stage 1: Application Preparation

The applicant is responsible for preparing the application, which includes the ECA Application Form and documents, such as technical reports. The ministry has provided this guide as well as other guidance material to help you understand what information is needed in order to review your application. (Guidance materials are available on the ministry’s website or by contacting the ministry.) In some cases, applicants may benefit from a meeting with the ministry. For some cases, a meeting is mandatory (see Mandatory Pre-application Meeting with the Ministry below). For others, the Pre-application Considerations help you to determine if your proposal may or may not benefit

from such a meeting. You should go through the Pre-application Considerations checklist as early as possible in the preparation stage (see below).

The Supreme Court of Canada has determined that the constitutional protection accorded Aboriginal rights and treaty rights under section 35 of the Constitution Act, 1982 requires the Crown to consult and where appropriate accommodate Aboriginal peoples when it has knowledge of an existing or asserted Aboriginal or treaty right, and contemplates conduct that may adversely affect the right in question. Throughout this guide, where reference is made to Aboriginal or treaty rights, this reference is intended to include both existing and asserted rights.

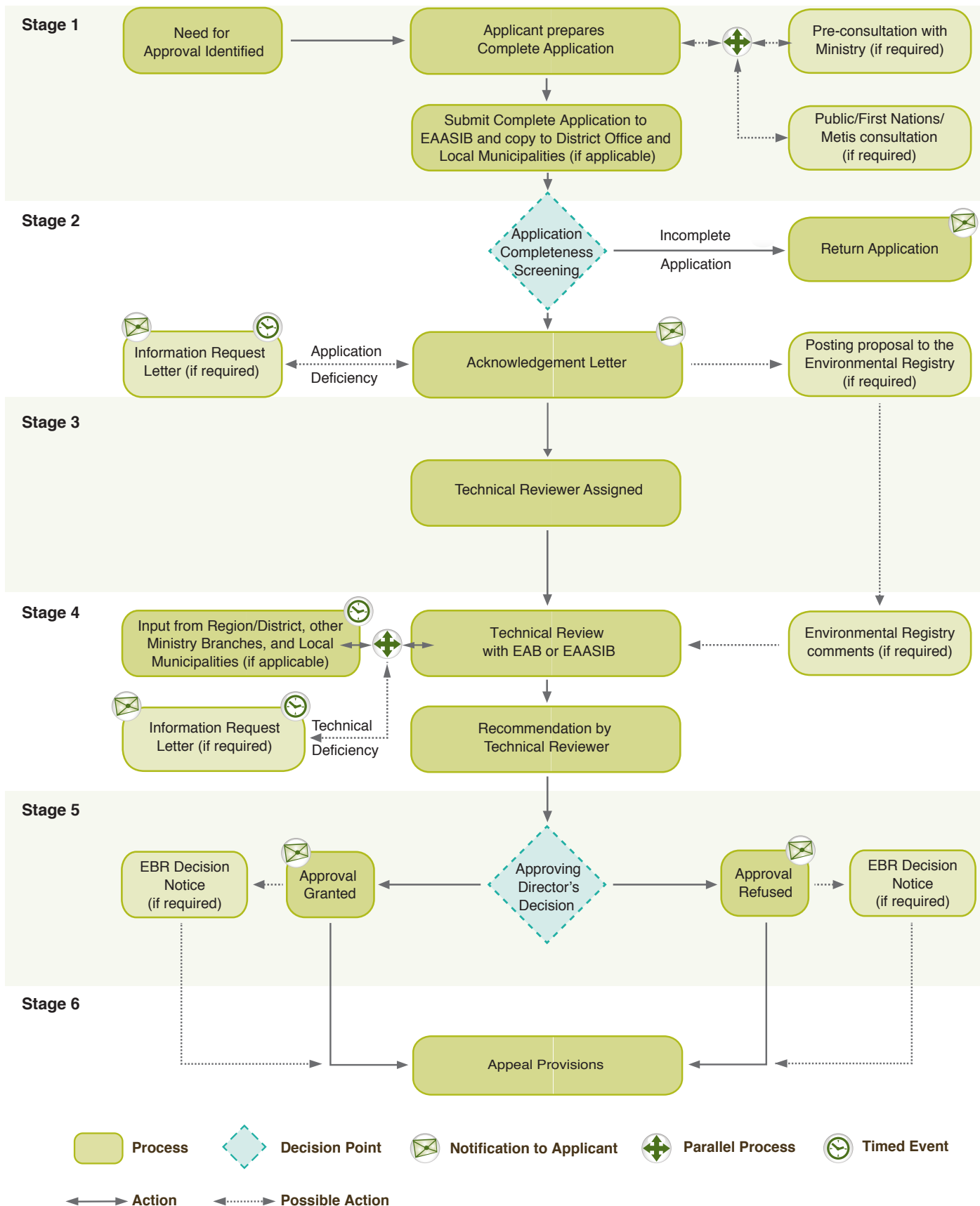
As your project requires regulatory approvals, it may trigger the duty of the Crown to consult on decisions that have the potential to adversely impact existing or asserted Aboriginal or treaty rights of First Nation or Métis communities. Early consideration of whether your project could trigger Crown consultation obligations can help avoid delays at later stages of the approval process. Where your ECA application triggers the Crown’s Duty to Consult, the procedural aspects of consultation are delegated to applicants.

The ministry is ultimately responsible for ensuring the Crown’s duty to consult has been met; however, the Crown may delegate certain procedural aspects of consultation to an applicant. Procedural aspects of consultation refer to the process of consultation and may, for example, include:

- notifying an Aboriginal community about a project;
- providing information about the potential adverse impacts of a project;
- providing an opportunity for an Aboriginal community to identify and provide information regarding any potential impacts on their Aboriginal or treaty rights;
- responding to concerns raised by an Aboriginal community;
- considering and/or making changes to a project to avoid, minimize or manage any potential impact to Aboriginal or treaty rights;
- reporting to the Crown on the consultation undertaken.

The pre application meeting with the Ministry discussed in this guide will help provide more details or particulars about Aboriginal consultation and how it may relate to your project.

Figure 1: Application Review Stages





## Mandatory Pre-application Meeting with the Ministry

A pre-application meeting with the ministry is required:

- When waste or sewage is involved and you are applying for an ECA with Limited Operational Flexibility (see [Part D](#) for more information on eligibility for Limited Operational Flexibility).
- When applying for a mobile sewage activity.
- If you answer yes to Questions 8-13 in the Pre-Application checklist found in Appendix 5 of this guide.
- If your proposed activity discharges effluents to groundwater or to a surface water body. (In this case you must engage in consultation with ministry district and regional staff to determine whether a ground or surface water impact assessment is required.)
- When you are applying for a system-wide or multi-site ECA. (An example of a system wide sewage ECA would be 1 consolidated approval for the collection system and treatment plant.)

## Pre-application Meeting with the Ministry

A pre-application meeting with the ministry is a dialogue between an applicant and the ministry before the applicant submits an ECA Application. Such consultations are meant:

- to help applicants define the environmental objectives for their project,
- to establish the general acceptability of the proposal, and
- to identify any special approval-related requirements.

It is important to note that a pre-application meeting with the ministry is not required for every application, nor does it necessarily speed up the application process or provide clarity beyond what has already been documented in published ministry guidance. The purpose of a pre-application meeting with the ministry is not to explain the basic application process to you.

## Deciding Whether You Need a Pre-application Meeting with the Ministry

To help you determine whether a pre-application meeting with the ministry could be useful in your case, the ministry has provided the Pre-application Considerations checklist. This helps you think about whether your particular project may be impacted by issues that might lengthen the ministry's review. You should use this checklist well in advance of submitting your ECA Application. If there is little likelihood of these issues impacting your project, it's unlikely that a discussion with the

ministry would be helpful and you should go ahead and prepare and submit your application.

If use of the checklist identifies issues with your proposed activity, you may find it valuable to contact the ministry before submitting an ECA Application. In these circumstances, ministry staff will work with you to develop a strategy to address issues that will be considered when reviewing your application. For example, the Pre-application Considerations checklist may help identify the need for public or First Nations and Métis consultation. By identifying and addressing this need before you make your application, you will prevent delay in the review process.

Another example is if your project involves new technology, the Pre-application Considerations checklist may help you identify different information requirements that may apply. In this case, you may also benefit from the New Environmental Technology Evaluation (NETE) program. The purpose of the NETE program is to assist the development, marketing and application of new environmental technologies. The program is specifically oriented to assist companies with technologies, which are new to Ontario but is also applicable to companies wishing to market existing technologies outside of Ontario. For more information please see *New Environmental Technology Evaluation (NETE) Program: A Guide for Applicants* [PIBS 3552].

A pre-application meeting with the ministry is strongly recommended if:

- You are aware of inquiries or concerns from First Nation or Métis communities about your operations, proposed operations, or a similar project in the area;
- Your project/activity is occurring on Crown land, or is close to a water body (lake, river, stream, etc) and especially if it may change access to either the land or water;
- Your project/activity is located in an area where hunting, fishing or trapping may take place or may change access to such areas; Your project/activity involves the clearing of forested land;
- Your project/activity is in an area that is not developed or an urban area; or
- Your project/activity is close to, or adjacent to, an existing reserve.

## How You Initiate a Pre-application Meeting with the Ministry

If a pre-application meeting with the ministry is required, or if you would like to engage in it, you may initiate it by contacting the local district office serving the area in which the proposed activity is to be located. For mobile activities contact the district office that serves your head office.

The district office may call upon, or direct you to, other offices, branches or sections of the ministry that may play a role in the approval process.

**TIP:** To find the appropriate local ministry district office, visit the ministry's website at: [www.ene.gov.on.ca/environment/en/about/regional\\_district\\_offices/index.htm](http://www.ene.gov.on.ca/environment/en/about/regional_district_offices/index.htm).

## Preparing for a Pre-application Meeting with the Ministry

In the pre-application meeting with the ministry you should be prepared to discuss the nature of your proposal, including identifying the equipment/process that constitutes your proposal. You should also identify any confidentiality concerns. If you have identified potential negative environmental impacts or negative impacts to Aboriginal or treaty rights, you may be required to consult with the public and/or Aboriginal communities. You should be prepared to discuss with the ministry strategies to carry out such consultation.

### Public Consultation

All proposals that are classified as Class II for the purposes of the Environmental Bill of Rights require public notification. See Part B, Form Section 3.1: Environmental Bill of Rights (EBR) Requirements. However, some proposals undergo additional consultation due to their specific features that may be of interest to the public, First Nations or Métis community. You may choose to engage interested parties before an application is submitted or if the Ministry of the Environment Director considers additional consultation necessary. For example, because of comments received through the EBR posting, environmental significance or complexity of the proposal, the Director may require you to hold public consultation as part of the application review process.

Engaging with interested parties before submitting an application can avoid delays during the application review process. If consultation is held during the review, the review cannot be finished until the consultation is completed. Early

dialogue and consideration of parties' concerns also allows for more efficient and timely information exchange. It also gives you more time to formulate effective responses, which could range from building community support with a better explanation of the proposal to modifying proposals to mitigate and avoid unwanted impacts.

Consultation is most effective when approached as an opportunity to build a trusting and respectful relationship in order to create a platform to discuss and potentially enhance a proposal. As the person behind the proposed activity, you are often in a better position to explain and build support for your proposal. As well, knowing your neighbourhood and the technical details of your proposal may allow you to identify stakeholder interest early and give you sufficient time to develop solutions to any concerns.

When conducting consultations it is important to note that it is a two-way process – you will be educating the community on the proposal and the community will be educating you on their interests or concerns. Through this process the Ministry of the Environment hopes that you will be willing to listen to and address concerns to achieve mutually beneficial solutions.

### Aboriginal Consultation

Where a ministry decision regarding an ECA triggers the Crown's duty to consult, and where appropriate accommodate, Aboriginal communities, a pre-meeting with the ministry provides an opportunity to, for example, discuss:

- communities to notify;
- potential extent of consultation;
- any consultation conducted to date; and
- general expectations regarding consultation.

The nature of the consultation required will vary with the strength of the assertion or the nature of the existing right, and the potential impacts on the exercise of the Aboriginal or treaty rights in question. Where, for example, adverse impacts are minimal or claims weak, the extent of information exchange required will be more limited. The level of consultation required may be limited to, for example, giving notice and discussing the Aboriginal community's concerns. Where activities or projects are more complex and adverse impacts more significant, more and differing effort may be required to ensure the appropriate and sufficient exchange and consideration of information. This

may include, for instance, face-to-face meetings and ongoing dialogue; perhaps requiring accommodation of the rights, and mitigation of any potential impacts. Consultation processes should be flexible and allow time for appropriate exchange of information and meaningful responses.

Consultation efforts should typically be directed to Chief and Council (or Métis community equivalent). Where available, the ministry will provide applicants with specific contact information for individuals within a community who have been identified as a consultation contact. If at any point a community that has not been identified by MOE requests to be consulted, applicants should contact MOE to discuss and confirm approach.

Your record keeping of the consultation undertaken is very important, not just with respect to an ECA, but for any process that preceded the ECA application and in respect of which consultation took place. If consultation as part of a prior process anticipated and addressed impacts associated with the activity now requiring an ECA, it may mean that no further consultation is required, but this should not be assumed in every case. You should keep a detailed record of any and all steps and efforts taken to notify and consult with Aboriginal communities, including:

- The project information that has been provided (e.g. map, location, project description and impact);
- A log of communications, listing all notification activities (include dates of meetings, copies of letters and details of phone calls), whether contact was in writing or oral, with whom and when, including attempts to communicate that have received no response;
- Detailed records of responses received about potential for adverse impacts to aboriginal or treaty rights;
- Proposed strategies to mitigate any adverse impacts to aboriginal or treaty rights and community responses to those strategies; and changes if any, made to the project as a result of consultation.
- Direction received from the Ministry of the Environment;
- Concerns raised and how they were addressed, and if they were not addressed, why.

The Ministry of the Environment will require reporting of a summary of these efforts and may ask to review a proponent's detailed records at any time.

**TIP:** Additional information regarding the Crown's duty to consult is available on the Ministry of Aboriginal Affairs website at: [www.aboriginalaffairs.gov.on.ca](http://www.aboriginalaffairs.gov.on.ca).

## Preparation of documents

You are responsible for obtaining and providing all documents required for a complete ECA Application. These documents, such as zoning maps, other permits and licenses and specifications from third parties (such as municipalities, other government ministries and technical suppliers) are identified in the ECA Application Form. Your application may be considered incomplete without these documents. Note that, by regulation, it is a minimum requirement that you include a list of any approvals, orders or other instruments that are relevant to your proposal under the Environmental Protection Act, Environmental Assessment Act, the Ontario Water Resources Act or the Safe Drinking Water Act that you already hold or are requesting.

Drawings, maps and site plans must show relative sizes and must contain a legend as per the minimum requirement in the Complete ECA Application Regulation. For example, they may be drawn to scale or marked with dimensions. This requirement applies to any drawing, map or plan whose purpose is to represent real world conditions. They should contain enough information so that the ministry can understand dimensions and relative positioning. Note that conceptual diagrams, such as process flows, piping and instrumentation diagrams, and schematics are meant to convey ideas rather than dimensional information and are exempt from this minimum requirement.

Additionally, maps and site plans (with the exception of a typical site layout for mobile equipment) must contain a north arrow. For clarity, any geographical representation should contain enough information for the ministry to determine where the location is in the real world; this usually requires geographic coordinates and a north arrow, at a minimum.

Lastly, where you have purposely prepared technical materials for this application, measurements should be expressed in metric units as per the Complete ECA Application Regulation. This applies to all the technical material described in Part C – Supporting Documentation and Technical Requirements of this guide. It may not be practical to have material that is obtained from third parties, such as manufacturer's specifications, historical material or drawings from a previous application converted to metric units; however, any key measurements



taken from these materials and used to design your current proposal should be converted to metric units and so explained in the technical material for the current application.

You are also responsible for preparing the technical information required for a complete application. Instructions on what must be included is found in this guide. Also, refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

## Financial Assurance

The purpose of financial assurance is to provide assurance the funds will be available to cover future environmental costs, such as site remediation and maintenance in the event that you are unable or unwilling to do so. The Director may determine during the review that financial assurance is required and the amount of that assurance.

There are a number of projects where financial assurance is normally required. You must include with your application a calculation of that financial assurance and a rationale for the calculation. Also, where financial assurance is mandatory, the calculation and rationale is required with the application. This is a minimum requirement for all applications.

To see a list of when financial assurance is normally required and for instructions on how to estimate the amount of financial assurance that should be provided, refer to EPA Part XII and *Guideline F-15: Financial Assurance Guideline* [PIBS 0226] issued by the ministry. 'If your type of project does not normally require financial assurance or financial assurance is not required by regulation, simply state that financial assurance is not required.'

On revocation of an ECA for which financial assurance was provided, the ministry returns the amount to you after it has confirmed it will be unnecessary to implement any remedial measures.

## Application Intake Process

Your application should be submitted as soon as possible as the ministry's review time will depend on several factors:

- the quality of the application
- the complexity of the proposal
- the associated documentation
- concerns of the District Office or Ministry supplementary reviewers.

An ECA is required before any construction or operations begin.

Once you have decided to apply for an ECA you begin by ensuring you have the most recent version of the ECA Application Form. Use of the correct form and completion of all applicable sections of it is a minimum requirement.

**TIP:** See the ECA Application Form for detailed submission instructions.

The ECA Application Form can be found on the ministry website in the *resources* section ([www.ene.gov.on.ca/environment/en/resources/index.htm](http://www.ene.gov.on.ca/environment/en/resources/index.htm)) or you can ask for a copy by contacting the Environmental Approvals Access and Service Integration Branch at:

**Ministry of the Environment  
Environmental Approvals Access and Service  
Integration Branch**

2 St. Clair Avenue West, Floor 12A  
Toronto, Ontario  
M4V 1L5

Telephone: 416-314-8001

Toll-free: 1-800-461-6290

Fax: 416-314-8452

E-mail: [eaabgen.moe@ontario.ca](mailto:eaabgen.moe@ontario.ca)

There are three forms for application for an ECA:

1. Application for an Environmental Compliance Approval (ECA Application Form) – this is by far the most common application and is used for all proposals other than those listed in (2) and (3) below.
2. Application for Approval of Mobile PCB Destruction Facilities
3. Application for Approval of Hauled Sewage (Septage), Sewage Biosolids and Other Wastes
  - This is for the site where the septage or other biosolids are applied. For the transporting of the septage or other biosolids, see below.
  - Note that if you hold a Waste Management System ECA for transporting the septage or biosolids, you may have the option of using the form in Appendix C of your ECA to apply for an associated site.

The ministry encourages you to use the electronic version of the ECA Application Form and submit it electronically to the ministry. Applying electronically makes the review process more efficient. As well, using the electronic version allows you to take advantage of the smart features built in, including:

1. embedded help text and links to guidance,
2. the inclusion of smart decisions that hide portions of the form you do not need to fill out based on information you provide,
3. a decrease in transcription errors because the electronic data can be input to the database.

Once you have completed the ECA Application Form and signed it, you submit it, along with your application fee, technical information and financial assurance calculations to the ministry.

### Application Fee

If you complete the ECA Application Form electronically the applicable fee will be calculated for you. If you complete the ECA Application Form on paper, you will have to calculate the fee manually using the available Ministry guidance for fees based on the Minister's Requirement for Fees – Application Fees for ECA under the Environmental Protection Act. Fill in Section 7 of the Application Form with your payment information.

**IMPORTANT:** Please note that there is no tax on the application fee. Also, if you are paying by cheque, you should make the cheque payable to the Minister of Finance otherwise, your fee cannot be processed and your application will be delayed. The ministry reserves the right to request a new or different fee amount, should the fee be revised based on our review of the application.

## Stage 2: Application Processing and Screening

The ministry screens all applications for completeness.

**IMPORTANT:** If the Director finds an application incomplete, the Director may return it to the applicant. For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

If the application is subject to the EBR requirements for public participation, a summary of your detailed project and process description will be posted on the EBR. See Section 3.1 for more details of the posting.

### Public Release of Application Information

Information in an application form is not considered confidential and the ministry may make it publicly available, except for an individual's name, telephone number, payment information, and site plans and building drawings for security sensitive sites (e.g. hydroelectric dams and nuclear facilities) where the public safety is of concern.

The public release of information contained in the application form and the documentation attached to the application form is subject to the provisions of the Freedom of Information and Protection of Privacy Act and the Municipal Freedom of Information and Protection of Privacy Act. These Acts define what may be disclosed to the public and the Director uses them to assess all requests s/he gets for information on file with ECA Applications.

## Stages 3 and 4: Application Assignment and Review

A technical reviewer is assigned to your application. That person performs the technical review of the information and coordinates comments from any supplementary reviewers, as well as EBR comments. Depending on your proposal, a supplemental review may be requested from other ministry or government branches, experts or the municipality.

The technical reviewer may determine that additional information is necessary for proper assessment of the application or that the application involves aspects that require submission of additional fees (in accordance with the Ministry's Fee Direction).

## Stages 5 and 6: Approval Decision and Appeal Provisions

The technical reviewer prepares a recommendation to the Director to either approve the application (with a draft ECA) or refuse the application.

### Director's Discretion to Hold a Hearing

The Director has discretion to call a hearing related to an ECA Application, regardless of whether the subject of the application falls under EPA subsection 9 or 27 or OWRA section 53. The hearing may be during, or on completion of, the technical review of the ECA Application.

## **Your Recourse After a Decision**

EPA section 139 allows you to request a hearing by the Environmental Review Tribunal (ERT) if the Director:

- Refuses to issue an ECA;
- Revokes or suspends an ECA;
- Imposes terms and conditions in issuing an ECA; or
- Alters the terms and conditions of an ECA or imposes new terms and conditions on an ECA after it is issued. Note that only the terms and conditions that are not substantially the same as the previous ones can be included in a request for a hearing.

You have fifteen calendar days after you are served with the ECA or with a refusal letter to file an appeal to the ERT. Information on how to file an appeal is included with all ECAs and refusal letters issued by the ministry.

## **Rights of Residents of Ontario to Appeal Decisions**

In addition to your rights of appeal, residents of Ontario have third-party rights to seek leave to appeal an ECA posted to the Environmental Registry under the Environmental Bill of Rights (EBR). Within 15 days of the Director's decision being posted on the Environmental Registry, residents may ask the Environmental Review Tribunal (ERT) for leave to appeal a Director's decision to approve an ECA. For additional information regarding third-party appeals see: *The Requirements of the Environmental Bill of Rights for Prescribed Instruments* [PIBS 3323].

# General Requirements for All Applications

**Part B of this guide describes information that all applicants are required to provide in the ECA Application Form:**

- The [Application Summary Section](#)
- [Section 1 – Applicant Information](#)
- [Section 2 – Project Information](#)
- [Section 3 – Regulatory Requirements](#)
- [Section 4 – Site Information](#)
- [Section 5 – Facility Information.](#)

## Application Summary Section

The Application Summary section of the ECA Application Form contains basic information about the applicant and project.

### Applicant Name

Insert the full legal name of the company, organization, entity or individual making the application. The applicant is the owner of the proposed activity, system, works or site that's the subject of the ECA Application and who is responsible for obtaining an ECA.

### Project Name

Please name your project. The name can be a project number, a project nickname or any other unique identifier you choose that may be used in all correspondence.

## Project Description Executive Summary

The project description executive summary is a brief, easy-to-understand description summary of your project (less than 400 words, if possible). This information is a summary of the detailed project and process description explained in the technical information requirements (see [Part C, Form Section 6.1: Supporting Documentation and Technical Requirements – General.](#)) and is a minimum requirement for all applications. It should be separate from the detailed description. For most proposals it should be provided in the application form itself; for applications for an environmental compliance activity that includes Limited Operational Flexibility the summary may be attached as a separate document. You should ensure that the information contained in both the summary and the detailed description is consistent with each other.

If your proposal is subject to requirements under the EBR, your project description executive summary will also serve as the EBR proposal abstract that the ministry posts on the Environmental Registry. The specific details of the proposal are not required in the summary but you should include the main or basic components, processes or items. A good summary uses simple, easy-to-understand language and avoids technical jargon that may be difficult to understand. The ministry reserves the right to edit your project description to meet the requirements of the EBR.

Your project description executive summary must include:

- The reason for the application – including whether it is for a new or amended ECA.
- A description of your business at the site of your proposal and the project or operations you propose to carry on.
- The main components or processes – this should include the main equipment or modifications, including pollution

control equipment or measures, and a description of the source the pollution control equipment or measures is/are meant to control.

- A description of the key operating parameters – this description should indicate the scale of the business, including hours of operations.
- A description of the discharges and/or waste characteristics – this should include information about what media the proposal covers, any programs used to monitor the contaminants, and:
  - the type and source of wastes;
  - discharges to the atmosphere; or
  - the receiver of effluents.
- If your application is for an ECA with Limited Operational Flexibility, this should be indicated.

**TIP:** For more information about ECAs with Limited Operational Flexibility see [Part D.](#) of this guide.

For samples of high-quality project description executive summaries that should be used as templates see [See Appendix 2.](#)

For additional information on the EBR requirements, refer to the ministry's guide: *The Requirements of the Environmental Bill of Rights for Prescribed Instruments* [PIBS 3323].

## Required Information

The required information section in the application summary is basically a checklist of the different sections of the ECA Application Form. If you are using the electronic ECA Application Form this information will automatically fill as you complete the sections. If you are filling out a paper copy of the Application Form you must fill this in manually.

## Fee Summary

The fee summary section should reflect the fees you are paying with your application. Note that if you are using the electronic ECA Application Form this information will automatically fill in. If you are filling out a paper copy of the Application Form you must fill in this information manually. The ministry assesses the fees and reserves the right to request additional fees, if required.

## Supplemental Application Information

The supplemental application information section should be used to identify others you are providing with a copy of

your complete ECA Application, for example, district offices, municipal offices, etc. Please provide this information here and not in a cover letter.

**IMPORTANT:** Note that you should not provide cover letters with your application. Any supplemental application information should be provided in this data field.

You can also use this section to bring to the ministry's attention any other important information about your application, such as describing when your operations might start or if you've had a pre-application meeting with the ministry (who, when, etc).

## Application Form Section 1: Applicant Information

Regardless of the activity you will be engaging in that requires an ECA, the ministry needs to know who you are and who will be responsible for the quality, accuracy, relevance and completeness of the information in the application. Section 1 of the Application Form requires you to provide information about *the Applicant*. As well, at the end of Section 1 of the Application Form the person with signing authority must sign, certifying to the accuracy and completeness of the application.

### Form Section 1.1: Applicant Information

The applicant is the person (individual, organization, etc.) that has legal responsibility for the proposed works/facilities to which the application relates and is the person who will hold the ECA if issued. Typically, the applicant is the legal owner or operator of the facility or equipment and is the party that is ultimately responsible for compliance with all of the conditions in the ECA. Unless the applicant is a municipal, provincial or federal government, a proof of legal name of the applicant must be submitted with all applications. The table on the next page shows acceptable documents for proof of legal name. The documents must be current and must accurately reflect the business name. Documents are acceptable only if they are provided by Ministry of Government Services or, if they are from other sources, they must be notarized as true copies that accurately reflect the current business name.

Note: Companies from outside of Canada must be registered in Canada and licensed in Ontario.

Table 1

Applicant Type	Acceptable Documentation
Canadian Corporations	<ul style="list-style-type: none"> <li>• Certificate of Status <b>and</b></li> <li>• A current filing under the Corporation Information Act – e.g Ontario Corporation Report <b>and</b></li> <li>• Single Business Number (SBN)</li> </ul>
Foreign Corporations	<ul style="list-style-type: none"> <li>• Extra-provincial Licence under Extra-provincial Corporations Act <b>and</b></li> <li>• An original signed copy of the letter from a lawyer in Ontario confirming the status and jurisdiction of incorporation of the corporation concerned and that is duly authorized to carry on business in Ontario <b>and</b></li> <li>• Single Business Number (SBN)</li> </ul>
Ontario General (GP) or Limited Liability Partnerships (LLP)	<ul style="list-style-type: none"> <li>• Ontario Business Name Registration Report under Business Names Act <b>and</b></li> <li>• Documents verifying legal names of all entities constituting the partnership appropriate for the type of each entity (corporation, individual* etc.) <b>and</b></li> <li>• Single Business Number (SBN)</li> </ul>
Ontario Limited Partnership (LP)	<ul style="list-style-type: none"> <li>• Limited Partnership Report under Business Names Act <b>and</b></li> <li>• Documents verifying legal name of the general partner appropriate for the type of person (corporation, individual* etc.) <b>and</b></li> <li>• Single Business Number (SBN)</li> </ul>
Extra-Provincial General (GP) or Limited Liability Partnerships (LLP)	<ul style="list-style-type: none"> <li>• Ontario Business Name Registration Report under Business Names Act <b>and</b></li> <li>• An original signed copy of the letter from a lawyer in Ontario confirming (a) the jurisdiction of the organization of the partnership; (b) that it is duly authorized to carry on business in Ontario; and (c) the legal names of the partners <b>and</b></li> <li>• Single Business Number (SBN)</li> </ul>
Extra-Provincial Limited Partnership (LP)	<ul style="list-style-type: none"> <li>• Limited Partnership Report under Business Names Act <b>and</b></li> <li>• An original signed copy of the letter from a lawyer in Ontario confirming (a) the jurisdiction of the organization of the partnership; (b) that it is duly authorized to carry on business in Ontario; and (c) the legal names of the general partner <b>and</b></li> <li>• Single Business Number (SBN)</li> </ul>
Individual/Sole Proprietor	<ul style="list-style-type: none"> <li>• Documents verifying legal name of the individual* <b>and</b></li> <li>• Master Business Licence to verify the business name (if applicable) <b>and</b></li> <li>• Single Business Number (if applicable)</li> </ul>

\* For individual applicants, the applicant has the option to come and show documents (passport or birth certificate) instead of sending it to the Ministry

The North American Industry Classification System (NAICS) code must be the one your business is classified under. If you do not know your NAICS you can find it in the Statistics Canada publication: *North American Industry Classification System (NAICS) – Canada* [Catalogue no. 12-501-XIE] on the website: [www.statcan.gc.ca](http://www.statcan.gc.ca). If more than one NAICS code applies to the different activities/businesses you carry on at the relevant site, you should list each NAICS code.

**TIP:** Do not enter the (Canadian) Standard Industrial Classification (CSIC), United States SIC (USSIC) or International SIC (ISIC) codes.



If you are applying for an Industrial Sewage Works project, please provide the NAICS code for the type of facility the sewage works will service, not simply the NAICS code representing *sewage works*.

The Business Activity Description should be a plain language description of your business endeavour. This may include the products you manufacture or sell, the services you provide, the machinery/equipment you use, etc.

## Form Section 1.2: Applicant Physical Address and Form Section 1.3: Applicant Mailing Address

You must provide an address for your business office and a mailing address if different from the business address. The business address represents the location of your administration, corporate or head office and it may be the same or different than the location of your proposal. If it is different, you must also provide the proposal site address in Section 4.1.

**TIP:** Note that the primary location is the address that represents the physical location of the front door or main entrance. Table 2 below illustrates how to complete this section and how it relates to Section 4.

Table 2

Your business office is:	In Section 1.2, you should put	In Section 4.1, you should put
...the same location as your site and represented by one civic or surveyed address	That one address and geo-referencing for the south-west corner of the site.	An indication that the site address and geo-referencing are the same as the business address.
... the same location as your site and represented by more than one civic or surveyed address	The one address that represents the primary location (physical location of front door or main entrance) and geo-referencing of the south-west corner of the primary location.	An indication that the site primary address is the same as the business primary address and all other addresses that represent the site.
... the same location as your site and not represented by either a civic or surveyed address	Geo-referencing coordinates that represent the primary location (physical location of the front door or main entrance) and geo-referencing of the south-west corner of the site.	An indication that the site geo-referencing is the same as the business.
...different from your site location and represented by one civic or surveyed address	The one address and geo-referencing for the south-west corner of the site.	The address(es) and geo-references that represent your site location.
... different from your site location and represented by more than one civic or surveyed address	The one address that represents the primary location (physical location of front door or main entrance) and geo-referencing for the south-west corner of the site.	
... different from your site location and not represented by either a civic or surveyed address	Geo-referencing coordinates that represent the primary location (physical location of front door or main entrance) and geo-referencing of the south-west corner of the site.	

## Form Section 1.4: Statement of the Applicant

A signing authority is an individual who has the authority to certify to the completeness and accuracy of the application. The person with signing authority must be an individual who has the authority to bind the applicant. See table 3 below for who this individual must be. You must provide the signing authority's title and contact information.

By signing, this person is certifying that the information provided to the ministry in the application and the information provided to technical contacts, who provided documents and data that are included with the application, is accurate and complete.

All applications must be signed as a minimum requirement under the ECA Application Regulation. The signing authority certifies to the completeness and accuracy of:

- the information provided to the technical contact(s) in order to develop the technical materials, and
- any information in the application not provided by a technical contact.

## Form Section 1.5: Statement of the Municipality

**IMPORTANT:** This statement is only required for proposed sewage works not including industrial sewage works or if the applicant is the municipality within whose jurisdiction the sewage works that are the subject of the application are, or are to be located.

The statement of municipality is a declaration by the municipality within whose jurisdiction the proposed sewage works are or are to be, located, that the municipality has no objections to the application. This is required to establish the municipality's general concurrence with the proposal, to ensure that the proposed works would not contravene any municipal by-laws or other requirements. The statement does not imply technical approval or acceptance of responsibility for the works.

Where the proposed works are, or are to be, connected to an existing sewage collection, treatment and disposal system, this municipal concurrence with proposed works means that the municipality has assured itself that the proposed works would be serviced adequately by the municipal sewage collection, treatment and disposal system, and would not result in exceedance of the uncommitted hydraulic and treatment capacity of the sewage collection, treatment and disposal system to comply with the effluent quantity and quality requirements specified in the existing ECA for the system.

Table 3

Business Entity	Signing Authority
Corporation	An officer or director of the corporation or a person (preferably an employee, not a consultant) who has authority to bind the corporation. If the person you name as a signing authority is not an officer of the corporation you must submit with the application a letter signed by an official of the corporation authorizing the person named to act on its behalf.
Individual/Sole Proprietor	The person who owns the business.
Partnership	An individual who is a partner in the partnership, or an officer or director of (or person who has the authority to bind) a corporation that is a partner in the partnership.  If the person you name as a signing authority is not an officer of the corporation that is a partner, you must submit with the application a letter signed by an official of the corporation authorizing the person named to act on its behalf.



## Application Form Section 2: Project Information

Section 2 of the ECA Application Form requires information that will help the ministry route your application to the appropriate reviewers. In this section you must also identify the technical contact(s) you relied on in preparing your ECA Application, since ministry staff will contact these people if technical questions arise as your application is reviewed.

Note that you must fill in all fields in Section 2 of the ECA Application Form. If a field is not applicable you should indicate this by choosing: *Not Applicable*.

### Form Section 2.1: Reason for Application

This provides the ministry with information about your current approval situation and proposed activity. It will also determine what other information you will need to include in the application, for example, what reports must be included. Your indication here may also determine who in the ministry will review the information you provide.

**TIP:** See Table 4 on the next page to help choose your category.

When determining the reason to apply, you should consider:

- Whether any existing ECA requires an amendment.
- Whether the application is for a different or new type of ECA that you do not currently hold.
- Whether the change you are seeking is essentially administrative.

### Categories

Below are brief descriptions of the different categories.

(Choose only one.)

- **New ECA** – if you do not hold an ECA for your proposed activity, you are applying to obtain one.
- **Revocation of ECA** – this category is for situations where your activity is no longer in operation; however, consider whether the site requires cleaning up or has post-closure terms and conditions before applying for revocation. You would typically choose this category if you are closing down a business that is governed by an ECA.

- Note that if your ECA for a landfill has post-closure terms and conditions, for example, conditions related to monitoring of methane gas, the Director for the Ministry of the Environment will not revoke your ECA.
- **Administrative Amendment to Existing ECA** – this category is for essentially administrative changes you propose to an existing ECA. To qualify, the changes must have no environmental significance. For example, you should choose this category if there are typographical errors you would like to correct. The ministry reserves the right to decide whether the change is administrative or requires a technical review.
- **Amendment to Existing ECA** – you should choose this category if the change you seek is related to an existing ECA. For example, you should use this category if you seek:
  - additional Limited Operational Flexibility;
  - to add another activity, equipment, facility, etc., to an existing ECA;
  - modifications to operating parameters to activities, equipment, facilities, works, etc., for which you have an ECA; or
- **Consolidation of Existing ECAs** – you should choose this option if you have multiple ECAs and wish to consolidate them into one ECA.
- **Application for Renewal of Limited Operational Flexibility** – you should choose this category if you have a historic *Basic Comprehensive Certificate of Approval* that allowed you operational flexibility. Because Limited Operational Flexibility provisions may expire, if you wish the provisions to continue, such ECAs need to be renewed by or on those expiry dates. Individual ECAs will list expiry dates, if any.
- **Transfer of Review Program** – this category is for specific types of sewage works in designated municipalities.

**TIP:** See Part E, Transfer of Review for Sewage Works for specific types of sewage works that fall into this category.

Table 4: The following shows how to select the appropriate ECA category.

		Step 2: And the reason you are applying is to:					
		Obtain one ECA to cover your activity or activities and all associated media	Change something technical (i.e. equipment/ process change) in your existing ECA	Change something administrative (i.e. name change) in your existing ECA	Renew an ECA that has Limited Operational Flexibility	Revoke your ECA	Apply for the Transfer of Review Program
Step 1: If you currently have:	No ECA	New ECA	Not Applicable				Transfer of Review Program
	One ECA	Not Applicable	Amendment to Existing ECA	Administrative Amendment to Existing ECA	Renewal of ECA with Limited Operational Flexibility	Revocation of ECA	Not Applicable
	Several individual ECAs	Consolidation of Existing ECAs	Not Applicable – The ECA Form will only deal with changes to one ECA.				Transfer of Review Program

## Form Section 2.2: Project Type

Once you have selected the Application Type, you need to indicate the media your proposal will involve: air, noise, vibration, Waste Disposal Site, cleanup of contaminated sites, sewage or Waste Management Systems (WMS). Because ECAs can be issued for more than one media, in Section 2.2 on the ECA Application Form, please indicate ALL the media your application relates to. The media you choose will depend on the subject of your application and you should consider all the equipment, processes, etc., that are covered by the application.

Here are a few rules of thumb that might help you identify the media that apply to your proposal:

Table 5

If your proposal falls under...	The media it will <i>usually</i> involve is:
EPA section 9	Air, Noise/Vibration, Odour
EPA section 27	Waste Disposal Site or Waste Management Systems
OWRA section 53	Sewage

**Noise and vibration** are dependent on the activity. So, for example, you should indicate noise as a media if you are proposing any changes to outdoor mechanical equipment (whether you are replacing existing equipment or adding new equipment) or if you are adding new openings to a facility. In general, changes to indoor noise do not come into play unless they have an audible impact outdoors that is likely to increase the noise levels at the nearest noise-sensitive points of reception.

The project type of **cleanup of a contaminated site** should be chosen if your proposal involves this type of activity. You may also have to choose one of the other project types depending on the discharges that your equipment has.

The project types that include a **mobile activity** refers to a discrete activity that you can move and that can occur at different locations at different times. The type of activity for which this category is appropriate usually involves the piece of equipment that can be relocated and that can perform the exact same function with the same emissions at another place. An ECA that approves a mobile activity may list the location(s) of the activity but the location may be independent of the activity.

Examples of projects that would be suitable for this type of ECA are: concrete crushing (air), cleaning of contaminated soil (cleanup of contaminated site), and grinders (mobile waste processing). Note that the ministry considers waste hauling as a Waste Management System under section 27 of the EPA not a mobile activity. Also note that applications for mobile sewage activities require mandatory pre-application meeting with the ministry.

If you propose to locate mobile waste processing equipment at a central location and have waste transported to that location for processing from off-site generators, the Waste Management Systems – Mobile Waste Processing approvals procedure is not applicable to your situation. In effect what you have is a waste processing site that requires approval for a Waste Disposal Site – Processing Site, subject to the public participation process prescribed in the Environmental Bill of Rights, 1993 (EBR). You should not indicate on your ECA Application that you are seeking an ECA for a Waste Management Site – Mobile Waste Processing.

## Option of Limited Operational Flexibility

Limited Operational Flexibility is a term or condition that may be included in an ECA for several types of projects. An ECA with Limited Operational Flexibility allows you to make some modifications to specifically defined aspects of your facility's operations or works without having to obtain an amendment to the approval (see Part D for information about what is eligible for Limited Operational Flexibility). Limited Operational Flexibility allows you to plan and make changes to your facility in a timely manner, reducing delays that would occur if you had to obtain a new or amended ECA. If you wish to apply for Limited Operational Flexibility, you must indicate this on your ECA Application.

The types of changes permitted under an ECA with Limited Operational Flexibility are restricted by the operating envelope defined by the ECA, as well as by conditions specified in the ECA. (Operating envelope can be described by a project's physical parameters or boundaries, as well as the parameters of the project's operating capacity.)

Because of the different nature of projects that are solely focussed on air, noise, sewage or waste, different information is needed when describing the operating envelope of a project, site, facility, equipment or works. For example, projects with emissions to the atmosphere will describe the operating envelope through emissions to the atmosphere and performance limits, while waste and sewage projects will focus more on the design, standards and management practices that heavily impact the capacity of the disposal site to properly manage the waste or sewage.

While a project or process may not operate to the limit of the operating envelope at all times, if you have plans to expand to those limits in the future, or if you believe you may need to exceed current operations from time to time, by having an ECA with Limited Operational Flexibility you can do so without having to go through a separate approvals process.

If you apply for Limited Operational Flexibility, keep in mind that only modifications that fall within the parameters that define the operating envelope are allowed. Operations or activities outside these parameters would not be covered by the ECA, since the ministry would not have considered them in issuing the ECA. To the extent an activity is outside the operating envelope you would have to apply for an amendment to the ECA.

If you apply for Limited Operational Flexibility, to define your operating envelope you will need to provide information over and above requirements for the project type. The description of your operating envelope must take into account your project description (the type of operation, such as a waste transfer station) and other information that defines or explains how the facility operates (production limits, engineering standards, best management practices, equipment and/or information regarding the emissions from the facility, for example, an emission summary and dispersion modelling report). The specifics of the information you must provide with your application will depend on your project. You can find details regarding the types of projects that are eligible for Limited Operational Flexibility and the information required for such applications in Part D.

## Form Section 2.3: Approval Information

### Indicate Who Initiated the Application

In Form Section 2.3 you must indicate who (or what) prompted you to submit an application for an ECA. You must indicate one of the six choices listed. The ministry requires this information because it helps us gather all relevant information before the review, such as ongoing project issues or involvement of other ministry branches. Applications can be initiated for a number of reasons. For example, an application can be initiated by an applicant who has identified the need for an ECA for a project, or if the applicant has an ECA they wish to modify or change. An application can also be initiated as a result of a request or order of the ministry or a provincial officer, or for various other reasons, such as a court order or tribunal decision.

Table 6

If the reason you initiated the application was ...	then you should choose:
You have identified the need to obtain an ECA, or You have an ECA you wish to modify.	Applicant
There is an existing term or condition in an ECA from the ministry that requires this application.	Condition of Existing Approval
You are fulfilling a requirement of an order issued by a provincial officer, such as an order from the Sector Compliance Branch under the Act.	Provincial Officer Order (Note: you must include a copy of the order with your application.)
You are fulfilling the requirements of an inspection report issued by a provincial officer.	Inspection Report (Note: you must include a copy of the report with your application.)
You are applying for an ECA because an order has been issued under section 20.18 of the EPA stating Part II.2 (i.e. EASR) does not apply to the activity at the site.	Section 20.18 order
You are fulfilling a requirement of an order (other than ones listed above), for example a director's order or an order that is the result of an appeal, etc., or you have received a letter from a district office recommending you apply for an ECA or modify an existing ECA.	Other (Note: you must indicate the reason and include any additional information as required.)

## Current ECAs

You must provide information about all existing ECAs that may be changed by this application. If, for example, you are applying for an amendment to an existing ECA, provide the number of that ECA; if you are applying to consolidate several existing ECAs, list all the ECAs that will be consolidated.

## Proposed ECAs

You must provide information about other ECAs that may be required for your proposed activity and that you have not yet applied for or are in the process of applying for. Indicate what project type, e.g., air, noise, waste, sewage, etc. and whether or not you have submitted an application.

## Form Section 2.4: Other Approvals/Permits for Facility

On Section 2.4 of the Application Form you must list all other approvals orders or other instruments issued under the EPA, EAA, OWRA or Safe Drinking Water Act, 2002 that are related to the project and that you hold, or that you have requested that are not listed on Section 2.3, at the same time as you are filing this ECA Application. Even if the approval will not be changed by this ECA Application, if it is connected with the activity in question you must list it here. You must provide ministry reference numbers or ECA numbers, when available.

For example, for Waste Management Systems you should list the numbers of all existing ECAs for any hauled sewage, processed organic waste or other organic Waste Disposal Sites associated with, or that you intended to be associated with, the Waste Management System that is the subject of your application for an ECA. Or, for example, if your application is for an ECA for a Waste Disposal Site, you should report whether an Environmental Assessment Approval has been issued.

## Form Section 2.5: Technical Contact(s)

A technical contact is an individual who is responsible for providing analysis, design or other reports required under different parts of the ECA Application.

**TIP:** This person may be the same person as the signing authority, if she/he can legally bind the company (see: Part A, Overview of the ECA Application Process, Stage 2: Application Processing and Screening, or he/she may be another employee of the applicant, or it could be a third-party consultant.

In your application, you must identify a technical contact for each media (air, noise/vibration, waste, sewage) who can be contacted in case the ministry has questions about the technical information.

The technical contact(s) involved in making the application must certify to the accuracy and completeness of the work for which they are responsible as a minimum requirement of the ECA Application Regulation. Note that a technical contact is only swearing to the quality, accuracy and completeness of the work (calculations, analysis, design, etc.) that is contained in the materials related to the media they represent; technical contacts are not certifying to the accuracy and completeness of the data given to them and on which they based their work. Therefore, if the technical contact and the signing authority are the same individual, that person must sign both certifications.

The ministry often contacts technical contacts identified on applications if, during the review of the application, clarification of information or data related to the technical contacts is required. A person certifying technical materials must have the relevant education and experience to provide that certification. Therefore, the ministry expects technical contacts to have sufficient knowledge and authority to be able to provide information, to develop reasonable solutions and to comment on the feasibility of terms and conditions.

Note that in some cases, the supporting document or report must be prepared by a specific type of technical contact, for example, a professional engineer or geoscientist as is described in this guide.

## Application Form Section 3: Regulatory Requirements

Section 3 of the ECA Application Form relates to regulatory requirements associated with seeking an ECA.

On Form Section 3 you must provide information about how you satisfied Environmental Bill of Rights (EBR) requirements and you must provide details of any public notification and consultation you held. You must also indicate whether your proposed activity is subject to the Environmental Assessment Act (EAA) and if it is applicable, you must provide information about how you fulfilled your obligations under the EAA.

**TIP:** If your application relates to a Waste Management System, none of the requirements asked about in Section 3 of the Application are applicable, in which case you should indicate *No* to the first questions in Section 3.1 and 3.2.

### Form Section 3.1: Environmental Bill of Rights (EBR) Requirements

You must identify what, if any, Environmental Bill of Rights (EBR) requirements apply to the project or the activities that are the subject of your application. The EBR requires public notification of proposed legislation, policies, regulations and other legal instruments<sup>1</sup> that could have a significant effect on the environment. The ministry must consider all public input and then must notify the public of its decision with regard to a proposal and it must indicate what impact public comment on the proposal had on its decision.

Public notification is posted on the Environmental Registry at: [www.ebr.gov.on.ca](http://www.ebr.gov.on.ca) and allows for province wide notification. For more information see the ministry publication *The Requirements of the Environmental Bill of Rights for Prescribed Instruments* [PIBS 3323].

### Proposals Classified as Prescribed Instruments

You must identify whether your proposal is classified as a prescribed instrument under the EBR. Almost all applications for an ECA are considered *Class II* prescribed proposals and

<sup>1</sup> Instrument means any document of legal effect other than a regulation issued under an Act and includes a permit, license, approval, authorization, direction or order issued under an act.



therefore subject to the requirements of the EBR (see Ontario Regulation 681/94). Note that prior to the legislative amendments, many proposals were either Class I or Class III, but they are almost all Class II now. You should answer *Yes* to the question: *Is this a proposal for a prescribed instrument under EBR?* unless your proposed activity matches one of the exceptions below.

As noted, there are some exceptions. Answer *No*, if your application falls into one or more of the following categories that are specifically exempt under Ontario Regulation 681/94, Part II from being considered a prescribed instrument under the EBR:

- If your application is for a Waste Management System that does not include a waste disposal site.
- If your application is for a proposal that would involve discharge of specific contaminants from a discharge point that is less than or equal to discharge already approved under an ECA for that contaminant and that particular discharge point.
- If your application is for a Waste Disposal Site and is only for one or more of the following:
  - the proposal is for an organic soil conditioning site within the meaning of Ontario Regulation 347 R.R.O. 1990;
  - the proposal is for an ECA to operate a Waste Disposal Site for household hazardous waste for a period of not more than 12 days per year; or
  - the proposal is for an ECA for mobile waste processing equipment.
- If your application is for an activity under EPA section 9 and it meets one of the following descriptions exactly:
  - the proposal would involve discharge of a contaminant from any one discharge point for a total of less than 10 hours in any seven-day period;
  - the proposal would involve discharge of a contaminant resulting from the preparation of food at a site for the purpose of selling the food at that site, at retail, or distributing it at that site free of charge;
  - the proposal would involve discharge of a contaminant resulting from operating combustion equipment (so long as that equipment is not fired with fuel derived from waste, other than wood waste) and so long as you do not operate the equipment for the purpose of generating heat or electricity for sale; or
  - the proposal would involve discharge of a contaminant from a storage tank or vessel.

## EBR Requirements for Class II Proposals

Class II proposals must be posted for a minimum of 30 days on the Environmental Registry and applicants must provide additional public notice. Additional public notice may be required such as:

- news release;
- notice through news media;
- door-to-door flyers;
- signs;
- mailings to the public;
- notice to community leaders and political representatives;
- notice to community organizations;
- posting on the EBR for an additional 15 days; or
- any other means of notice that would facilitate more informed public participation in the decision-making process.

The details of your proposed activity dictate the type and nature of public participation required. For example, the location of the proposed facility, the operation of the proposed facility, and the surrounding community and stakeholder interests all come into play. For typical projects, additional public notice requirement for a Class II proposal can be satisfied in a fairly straightforward manner, such as extending the EBR commenting period beyond the minimum 30 days.

Proposals that may attract a higher level of interest may require more engaged additional public consultation.

**TIP:** The Pre-application Considerations checklist (see Part A, Overview of the ECA Application Process, Stage 1: Application Preparation) can help you determine if your project has issues that would be of interest to the public or First Nations and Métis communities.

If you think this is the case for your proposal, you should consult with your local district office of the ministry to determine what level of stakeholder/community consultation will be required.

Other than for postings of proposals on the EBR Environmental Registry, which happens after you submit your application to the ministry, and the formal notification of adjacent landowners, which must be undertaken at the time of the application, the ministry expects you to carry out the public notification/stakeholder consultation before submitting your application. As

well, the ministry expects you to address in your application any stakeholder concerns expressed through the process.

Delaying consultation until after the ECA application is submitted, with the two exceptions above, may result in delays to the review process that could have been avoided if consultation was done earlier.

## Exemptions from EBR Posting Requirements

The EBR exempts certain proposals from the public posting requirements. You should indicate if you believe your application falls under one of these exemptions and provide additional information explaining why you believe it is exempt. After reviewing your reasons, the Director or his/her delegate will decide if the exemption applies.

Here is a brief explanation of the information you should submit with regard to each exemption:

- **Equivalent Processes**

If in the opinion of the Minister the environmentally significant aspects of your proposal have already been considered, or are required to be considered in a process of public participation that was substantially equivalent to the process required in relation to the proposal under the EBR, your proposal will be exempt under EBR subsection 30(1) from the mandatory public consultation requirement.

You must include with your application details of the completed province-wide public participation, including the following information:

- the type of province-wide public participation;
- a description of how it was conducted;
- the number of people that participated;
- the type of public comments that were received;
- actions taken as a result of public comments;
- an indication of whether ministry staff were involved in the process; and
- documentation verifying the public participation.

- **Emergency**

Your proposal will be exempt under EBR subs. 29(1) if, in the opinion of the Minister, the delay involved in allowing for public participation would result in:

- danger to the health or safety of any person,
- harm or serious risk of harm to the environment; or
- injury or damage or serious risk of injury to any property.

You must provide information that demonstrates that the delay in giving notice or considering the public response to the notice would result in one of the dangers or harms above.

- **Environmentally Insignificant Amendment/Revocation of an Existing ECA**

If your application is for an amendment or a revocation of an existing ECA and where, in the opinion of the Minister, there will be an insignificant effect on the environment, you are exempt under EBR subsection. 22(3).

You must provide an explanation of the proposal that demonstrates that there will be no significant impact on the environment. The types of proposals that likely would have no environmental significance could include, for example, requests to change reporting requirements and revocations of ECAs for pollution control equipment for processes no longer in operation.

- **Proposal is Subject To/Exempt from EAA Requirements**

If your proposal is for a project where a decision has been made under the EAA or the application is for a project that has been exempt from the requirements of the EAA, exempt under EBR subsection 32(1) and 32(2) from the mandatory public consultation requirements.

You must provide proof that your proposal has either met the EAA requirements (proof of completion of the EA process) or has been granted an exemption through an exempting regulation or declaration order.

- **Tribunal Decision**

If, in the opinion of the Minister, your proposal represents a step in the implementation of an undertaking approved by a decision made by a tribunal under an Act and there was an opportunity for public participation, you are exempt under EBR subsection 32(1).

You must provide a copy of the tribunal decision, along with documentation indicating that the tribunal considered your proposal in arriving at the decision.

Note that regardless of whether your proposal is exempt from the mandatory public participation requirement, a project of significant public interest may still be posted on the Environmental Registry as an *information only posting*, under EBR section 6.

For further information regarding the EBR and its Regulations, see: *The Requirements of the Environmental Bill of Rights for Prescribed Instruments* [PIBS 3323].



## Form Section 3.2: Environmental Assessment Act (EAA) Requirements

Section 3.2 of the Application Form deals with whether the proposal or any of its elements is subject to the requirements of the Environmental Assessment Act (EAA) and how you have fulfilled those requirements. Under the EAA, the approval cannot be issued for an undertaking subject to the EAA unless all applicable requirements of the EAA have been satisfied. On this basis, the Director will not consider applications for ECAs for proposals subject to the EAA if the Director concludes that you have not completed the applicable EA process. In this case, the Director will return your ECA Application without deciding whether to issue you an ECA.

For further details on the requirements of the EAA, refer to: *Environmental Assessment Act (EAA)*.

### Is the Proposal Subject to the EAA?

An answer of **Yes** in section 3.2 of the Application Form means you are indicating that your proposal is subject to the EAA requirements but it may be exempt from the EAA if it falls within one of the exemptions listed. If you answer **No** you are indicating that your proposal is not subject to the EAA requirements at all.

A project is not subject to the EAA if it is not considered an *undertaking* as defined under the EAA and its regulations. Refer to the definition of an *undertaking* in the EAA and its regulations to confirm that your project does not fall within that definition and is therefore not subject to the EAA.

### Exempt from the Requirements of the EAA

An undertaking that is subject to the requirements of the EAA can be exempted from the requirements of the EAA through an order or regulation under the EAA. If your proposal is exempt from EAA requirements you must indicate whether your proposal is exempt because it falls under an exemption regulation, a *declaration order*. You must include supporting information as appropriate. If the exemption regulation or a declaration order does not refer directly to the works that are the subject of your application, you must explain in a letter or other document how the exemption regulation or declaration order applies to your proposal.

## Fulfillment of EAA Requirements through Completion of a Class EA Process

If you satisfied the EAA requirements through one of the ten Class EAs, you must indicate the title of the Class EA and the project category, and you must submit a copy of the Notice of Completion (if applicable). This includes the Municipal Engineers Association Municipal Class Environmental assessment (MEA Class EA).

Members of the public may request that a Class EA project be elevated to a higher level of scrutiny if there are outstanding issues that have not been resolved. This is referred to as a Part II Order request. If your project has been the subject of a Part II Order request you must provide a copy of the Minister's decision letter and additional supporting information, as appropriate.

## Fulfillment of EAA Requirements through Regulation

EA requirements for waste management projects are detailed in Ontario Regulation 101/07 and for electricity projects in Ontario Regulation 116/01. These regulations, which apply equally to public and private sector projects, provide a prescribed Environmental Screening Process (ESP) as a streamlined EA option for certain types of waste management or electricity projects.

If you satisfied the EAA requirements through any of the above streamlined EA processes you must provide a copy of the Statement or Notice of Completion as applicable. For more information, refer to the applicable guide: *Guide to Environmental Assessment Requirements for Waste Management Projects* [PIBS 6168] or *Guide to Environmental Assessment Requirements for Electricity Projects* [PIBS 4021].

For waste management and electricity projects, members of the public may request that a project undergoing a streamlined EA process be elevated to a higher level of scrutiny if there are outstanding issues that have not been resolved. This is referred to as an *elevation* request. If your project has been the subject of an elevation request, you must provide a copy of the Director's or minister's decision letter and additional supporting documentation.

It should be noted that applications specifically for Waste Management Systems generally are not subject to the requirements of the Environmental Assessment Act.

EA requirements for transit projects and Greater Toronto Transportation Authority undertakings should refer to Ontario Regulation 231/08. This regulation provides a prescribed transit project assessment process that proponents must follow for selected transit projects identified in the regulation. If you satisfied the EAA requirements through this EA processes, you must provide a copy of the Statement or Notice of Completion as applicable. For more information regarding this process EA requirements for these types of projects, refer to: *Guide: Ontario's Transit Project Assessment Process* [PIBS 7267].

For transit projects, the public has an opportunity to submit an *objection* to the Minister for which the minister or his/her delegate will issue a notice to either allow a project to proceed or to require further study or an individual environmental assessment. If your project has been subject of an *objection*, you must provide a copy of the minister's notice if one has been issued for your project.

## Fulfillment of EAA Requirements through Completion of Individual Environmental Assessment

If you met the EAA as a result of preparation of an Individual EA, you must provide a copy of the signed Notice of Approval.

## Form Section 3.3: Consultation/Notification

Section 3.3 of the Application Form is where you should describe your consultation/notification activities.

Provide a brief summary of the consultation/notification efforts you have completed, or are in the process of completing, to fulfill the EBR and/or EAA requirements. Describe any consultation/notification activities you have undertaken to fulfill other requirements, such as other legislation or with community liaison groups, etc., with an interest in your application. This information will assist the ministry in dealing with any responses from the EBR process outlined above.

The ministry recommends that you fully complete all required public consultation before submitting your ECA Application because public comments may affect your design and/or operational procedures related to the site.

If you have carried out additional consultation/notification you should provide a brief summary of it in your ECA Application and include details and supporting information. It is in your interest

to keep the ministry as informed as possible when significant public interest is generated by your application.

Keep in mind that the appropriate level of consultation/notification is something you must determine on a project-by-project basis and is based on a combination of factors, including: potential environmental impacts, the scope and complexity of the project, and the level of stakeholder interest.

The ministry may advise you during our review process to carry out additional public consultation for reasons that include environmental significance, complexity of the proposal, public interest and to provide time for the public to make informed comments. The district office of the ministry can assist you in determining an appropriate level of consultation/notification.

For Waste Disposal Sites, unless it is an application for administrative amendment of an ECA, at a minimum you must send letters to the adjacent landowners and tenants notifying them of the proposed facility or changes to the existing facility. The letter must inform the recipients of the details of the proposed operation and request that they address their concerns and/or objections to the ministry within fifteen (15) days of their receipt of your letter.

For Waste Disposal Sites you must provide with your ECA Application a Public Consultation/Notification Report that includes, at a minimum, the following:

- a copy of the neighbour notification letter you sent adjacent property owners and tenants informing them of the proposal;
- a list of recipients;
- a detailed overview of all of the consultation/notification efforts that you have completed or are in the process of completing related to the project;
- a detailed summary of all comments and concerns you received; and
- an explanation of how you addressed the comments and concerns you received.

Here are some examples of consultation/notification that you might describe in Section 3.3 of the ECA Application Form and include details with your application:

- Consultations with First Nation or Métis communities concerning potential impacts of the proposed project on asserted or established Aboriginal or treaty rights.
- Consultation you were required to undertake under Regulation 419/05 s. 34 with respect to a request for an altered air standard or under Ontario Regulation 419/05 s.

39 as part of an application for registration to a technical standard.

- Any ongoing communication you are having with a public liaison committee or local interest group that may make significant comments through the Environmental Registry. If you are having ongoing communications you must provide an overview of them. The need to communicate with interested members of the public may be identified prior to the application or may be initiated during the preparation of the application. If the ministry is aware of the ongoing communication then the ministry can appropriately respond to Environmental Registry comments.
- Notification you provided to Environment Canada under Article V of the Canada-United States Air Quality Agreement. This agreement, signed in 1991, is intended to promote cleaner air and improved health through increased cooperation between Canada and the U.S. Article V requires the reporting of major sources of air emissions located within 100 kilometres of the Canada/U.S. border. The thresholds for reporting sources are as follows:
  - new sources that are expected to emit greater than 90 tonnes per year for any one of the following: SO<sub>2</sub>, NO<sub>x</sub>, CO, TSP or VOC;
  - major modifications of existing sources that are expected to emit greater than 40 tonnes per year for any one of the following: SO<sub>2</sub>, NO<sub>x</sub>, CO, TSP or VOC;
  - new or modified sources that are expected to emit greater than one tonne per year of any one listed hazardous air pollutant (see the list on the Environment Canada website under *Canada-U.S. Air Quality Agreement*).

You should determine whether you have a notification requirement under the agreement before you submit your ECA Application. You can find the Canada-U.S. Air Quality Agreement and Notification Form through Environment Canada at: [www.ec.gc.ca/air/default.asp?lang=En&n=F36D0AF6-1](http://www.ec.gc.ca/air/default.asp?lang=En&n=F36D0AF6-1).

If you provide notification under the agreement you must include a copy of the notification to your ECA Application as proof of notification. The ministry will not forward a copy of the notification on behalf of the applicant.

## Application Form Section 4: Site Information

In Section 4 of the ECA Application Form you must provide information about the location, where the works, site, system, storage location or subject of the application is to take place. You must provide information about the physical location of the activity, as well as characteristics about zoning, classifications, the owner, whether it is in a source-protection area, etc. There are different data requirements depending on whether your proposal is for a stationary or mobile activity or a Waste Management System with vehicles.

If the information you provide is inadequate, the Ministry of the Environment Director will consider your ECA Application incomplete and your application may be returned, minus the non-refundable administrative processing fee.

### Form Section 4.1: Site Address or Storage Location

This address is the location of your proposed activity or, in the case of waste management systems, the storage location of your vehicles or mobile equipment. This may be the same address as your business office and you can indicate that here. However, if the addresses are different or if you have a location(s) that represents multiple addresses, you will enter more information here.

**TIP:** Note that the primary location is the address that represents the physical location of the front door or main entrance. Table 7 on the following page illustrates how to complete this section and its relationship to section 1.1 of the ECA Application Form.

Table 7

Your site/storage location address is:	In Section 4.1, you should	In Section 1.2, you should have put
...the same location as your business and represented by one civic or surveyed address	Indicate that the site/storage location address and geo-referencing are the same as for the business.	The one address and geo-referencing for the south-west corner of the site.
... the same location as your business and represented by more than one civic or surveyed address (this includes a site that covers multiple addresses or if you have multiple vehicle or equipment storage locations)	Indicate that the site/storage location primary address and geo-referencing are the same as the business office and also list all other addresses that represent the site or the multiple storage locations.	The one address that represents the primary location and geo-referencing of the south-west corner of the primary location.
... the same location as your business and not represented by either a civic or surveyed address	Indicate that the site/storage location geo-referencing is the same as the business geo-referencing.	Geo-referencing coordinates that represent the primary location and geo-referencing of the south-west corner of the site.
...different from your business location and represented by one civic or surveyed address	Provide the one address and geo-referencing for the south-west corner of the site/storage location.	The address(es) and geo-references that represent your business office location (see section 1.1).
... different from your business location and represented by more than one civic or surveyed address (this includes a site that covers multiple addresses or if you have multiple vehicle or equipment storage locations)	Provide the one address that represents the primary location and geo-referencing for the south-west corner of the site/storage location and list all other addresses that represent the site or the multiple storage locations.	
... different from your business location and not represented by either a civic or surveyed address	Geo-referencing coordinates that represent the primary location and geo-referencing of the south-west corner of the site/storage location.	

**Attach a separate list of addresses if necessary.**

## Site Geo-Reference Information

Site geo-referencing information is the geographic location of the site identified as point coordinates of the site in reference to the universal transverse mercator (UTM) grid adopted for this purpose by the ministry. The geo-reference data the ministry requires is:

- **Map Datum** – this is the UTM datum of the map or GPS (Global Positioning System) used to specify position of the point (or points) of reference. There are two map datums in use in North America: the North American Datum 1927 (NAD27) and NAD83. Though the ministry prefers NAD83 coordinates because the Ontario Base Maps are constructed using this datum, we will accept NAD27 coordinates.
- **Zone** – this is the UTM Zone within which the site is located; there are four UTM Zones within Ontario: 15, 16, 17 and 18.
- **Accuracy Estimate** – this is the accuracy (+/- metres) of the UTM northing and easting coordinates for the point(s) of reference you provide. The accuracy will depend on the method used to gather the data, for example, a direct geodetic survey may be accurate within as little as one metre, while GPS may guarantee accuracy from 1-10 metres or no more accurate than 10-30 metres (depending on its quality), while a topographic map has a range of accuracy of from 10-100 metres.
- **Location Reference** – defines where the coordinates were taken relative to the site (for example, physical location of the front door or main entrance of a site).
- **Geo-referencing Method** – this is the method used to generate the data for the UTM northing and easting coordinates provided for the point(s) of reference. The geo-referencing methods you could specify include: determination by geodetic survey, estimation from a map or a GPS, or another method you specify.
- **UTM Easting** – this is the distance in metres from the western delimiter of the points of reference UTM Zone to the point of reference.
- **UTM Northing** – this is the distance in metres from the equator to the point of reference.

For stationary proposed activities, you must show the site geo-reference point(s) you indicate in Section 4.1 of the Application Form on a scaled area location plan that you must also submit with your applications. The scaled area location plan differs from

the Site Plan in that it shows general location of the site with respect to the surrounding area without any details of the actual site. It is usually a map showing where the site/facility is located and the boundaries of the site.

**TIP:** Scaled area location plans are not required for Waste Management Systems.

## Form Section 4.2: Site or Storage Location Information

### Information About Ownership of Site Property

You must indicate whether you own the property of your proposed site/storage location. If you are not the owner, you must include a document, such as a letter or lease, signed by the property owner indicating your authority to install and operate the facilities or store vehicles or equipment on the land. This is a minimum requirement for all applications.

### Operating Authority

The operating authority is usually the owner of the site or a third party authorized under an agreement to operate and maintain the works under the proposed ECA for the owner. It is the owner who is responsible for complying with any and all of the terms and conditions of the ECA.

For stationary proposed activities, if you are not the operating authority of the site, you must provide any agreements between parties associated with the source of emissions, such as agreements that may exist between the owner of the site and the operator of any equipment on the site.

## Niagara Escarpment Planning & Development Act (NEPDA) Permission

If the site/storage location is located in an area covered by the Niagara Escarpment Planning & Development Act (NEPDA) development control you must include a copy of the NEPDA Development Permit. To find out if the site/storage location is in an area that falls under the NEPDA contact the Niagara Escarpment Commission. If the site is subject to the development control, the Director may not issue an ECA unless you have obtained a Development Permit and s/he will return your application.



## Oak Ridges Moraine Conservation Plan (ORMCP)

If the site/storage location is located on Oak Ridges Moraine Conservation Plan (ORMCP) you must include proof that you received municipal planning approval for the proposed activity. If your project is subject to the ORMCP and you have not received municipal planning approval your application will be returned.

### Form Section 4.3: Site Zoning and Classification

The information in this section is a minimum requirement under the ECA Application Regulation for all applications, except for mobile equipment and waste transportation under a Waste Management System.

You must provide:

- Current land use of the site of the proposed activity.
- Official plan designation if a municipal official plan exists and your site is located within the plan. You must provide a copy of the designation of the site as fitting within the official plan.
- Zoning of your proposed site. You can obtain this information from the local municipal planning department. Also, if a zoning map is available, you must include a copy of that map as a minimum requirement under regulation.
- Current land use(s) of the adjacent properties. Identify all uses that apply. If you check *Other* you must explain what you mean.
- Zoning of adjacent properties. Please supply the zoning designation for the land.

**TIP:** If your proposed activity is a Waste Management System, you will only need to indicate that your storage location is zoned appropriately in this section.

Before you submit your ECA Application you should meet with the municipality to confirm that your proposed activity is consistent with local zoning.

As part of the ministry's review process, especially for Waste Disposal Sites and sewage works, we may circulate ECA Applications to local municipalities for comments. Consulting with the municipality before you submit an ECA Application allows you to resolve any contentious zoning issues up front

before ministry staff reviews your application. You must undertake mandatory municipal consultation if your application is for an ECA with Limited Operational Flexibility for a Waste Disposal Site or sewage works. Please refer to Part D of this guide for additional details.

### Form Section 4.4: Point of Entry into Ontario

For Waste Management Systems – General only. This is the point where vehicles that are stored at an address outside of Ontario enter the province.

### Form Sections 4.5: Source Protection/ Drinking Water Threats

Section 4.5 of the Form requires information regarding the relationship between the activities occurring at sewage works or waste site and source protection requirements. You must indicate in your ECA Application whether the location of the sewage works is in one of the source protection areas in the province. If it is in a source-protected area you must identify the specific vulnerable area identified in a ministry-approved Assessment Report.

**TIP:** For more information on Technical Assessment reports visit the ministry's website. (PIBS 7559e04)  
[www.ene.gov.on.ca/environment/en/subject/protection/STDPROD\\_080600.html](http://www.ene.gov.on.ca/environment/en/subject/protection/STDPROD_080600.html)

This could be a wellhead protection area, intake protection zone, significant groundwater recharge area, or highly vulnerable aquifer.

The proposal may have, or propose to have, several activities occurring on site that could be identified as threats to sources of drinking water in a ministry-approved Assessment Report. The only activities that are considered a drinking water threat are within section 1.1 of Ontario Regulation 287/07. The tables provided by the Province regarding drinking water threats identify the circumstances and associated reference numbers for the activities that could be drinking water threats.

**TIP:** See *Tables of Drinking Water Threats* [PIBS 7561] (note that you will need to check the original tables and the list of amendments, both of which are under the same PIBS reference number).

The risk associated, or type of drinking water threat, is identified as significant, moderate or low, based on the specific circumstances associated with the activity (in other words, volume of effluent discharge, amount of fuel stored, etc.) and location of the activity (in other words, which vulnerable area and scoring associated with that area). Every different activity is identified separately as a significant, moderate or low drinking water threat. Where activities are identified as significant drinking water threats, policies in source protection plans are to direct how those activities are to be risk managed. This will impact the content of the terms and conditions issued on an ECA with regard to sewage works.

For more information about source protection, contact your local conservation authority or visit the ministry's website at: [www.portal.gov.on.ca/ONT/portal61/drinkingwater](http://www.portal.gov.on.ca/ONT/portal61/drinkingwater).

## Form Section 4.6: Receiver of Effluent Discharge

For Sewage Works (including Storm Water) proposed activities, you also need to indicate what the intermediate and final receiver will be.

For information on what a *policy 2 receiver* is and the circumstances and procedures for a deviation approval, see: *Procedure B-1-5 Deriving Receiving Water Based, Point Source Effluent Requirements for Ontario Waters* [PIBS 3302].

If you have received Conservation Authority clearance, you should attach it to the application. If your proposal is for a stormwater management works with an outfall to a location other than existing stormwater management ponds or storm sewers, the ministry will ask you for the clearance if not provided with the application.

## Application Form Section 5: Facility Information

Section 5 of the ECA Application Form requires information about the characteristics of the facility. This information is used to define the operating envelope of your activity, equipment, process and facility, and is organised by media: air, noise/ vibration, sewage or waste (Waste Disposal Sites and Waste Management Systems).

You must fill in all sections (and fields within the sections) that are relevant to the media and relevant to your project. If a subsection is not applicable, please check the *N/A* box at the top of that subsection.

In Section 5 of the ECA Application Form the ministry requires fairly specific information about the facility where the activity will take place. Where relevant, definitions are included on the Application Form itself.

## Form Section 5.1: Facility Information – Air

For all projects falling under EPA section 9, except for noise (see section below) there are three subsections on the ECA Application Form that you must fill out:

- Summary of Equipment that Discharges Contaminants to the Air (Form Section 5.1.1)
- Emission Summary Dispersion Modelling (ESDM) Report (Form Section 5.1.2)
- Ontario Regulation 419/05 Requirements (Form Section 5.1.3)

### Form Section 5.1.1: Summary of Equipment with Contaminants to Air

You must check off all categories of equipment with discharges to air that apply to your project and indicate the number of pieces of each type of equipment that you checked off. You should only count the equipment that is the subject of the application and are new (never before approved) or whose discharges have changed to be greater than what was previously approved.

### Form Section 5.1.3: Ontario Regulation 419/05 Requirements

#### Which of the following sections of Ontario Regulation 419/05 applies to the facility?

You must indicate which section of Ontario Regulation 419/05 applies to your facility. Ontario Regulation, Reg. 419/05 imposes concentration-based point of impingement limits for contaminants and requires the use of approved dispersion models to assess compliance with these limits. The requirements for your facility are dependent on which section of the regulation applies. For more information and guidance see Ontario Regulation 419/05, sections 19 and 20 and *Guideline*

*A-10: Procedure for Preparing an Emission Summary and Dispersion Modelling (ESDM) Report* [PIBS 3614].

### **Has an instrument under O. Reg. 419/05 been issued?**

Under Ontario Regulation 419/05 there are several instruments that are available, such as: a notice, order, approval, site-specific standard or technical standard. A common example is an *adjacent property request* where the emissions summary and dispersion modelling report would then include the site information for the adjacent property as well as your site (see section 4 of Ontario Regulation 419/05). This information is important for the review of your application. You must indicate, by reference number where available, all instruments that have been issued for your facility under Ontario Regulation 419/05.

### **Is an instrument under Ontario Regulation 419/05 being requested as part of this application?**

You must indicate any instruments under Ontario Regulation 419/05, as described above, that you are requesting as part of this application. Applicable forms and supporting information for each instrument request must be provided. For more information and guidance refer to Ontario Regulation 419/05.

Note that an application for approval of a site specific standard or for registration to a technical standard may be made in conjunction with an ECA application. For details regarding the application process for technical standards refer to: *Guide to Applying for Registration to the Technical Standards Registry – Air Pollution* [PIBS 7804]. Applicants may request that the ECA be consistent with the technical standard, as per Ontario Regulation 419/05 subsection 39(2). For details regarding requesting a site-specific standard refer to: *Guideline for the Implementation of Air Standards in Ontario* [PIBS 5166e02]. A facility may apply for an ECA in conjunction with its request for a site-specific standard, as per Ontario Regulation 419/05 subsection 32(4).

### **Do you exceed any section 30 Upper Risk Thresholds (Schedule 6)?**

You must indicate if your facility exceeds, or might exceed, any of the upper risk thresholds (URT) listed in Ontario Regulation 419/05 Schedule 6. Please note that where a URT is suspected of being exceeded at any Point of Impingement (POI), Ontario Regulation 419/05 subsection 30(3) requires immediate notification and additional reporting and assessment. For additional information refer to: Ontario Regulation 419/05 section 30 and *Guideline A-10: Procedure for Preparing an Emission Summary and Dispersion Modelling (ESDM) Report* [PIBS 3614].

### **Is the facility located in a multi-tenant building?**

You must indicate if your facility is located in a multi-tenant building. If your facility is located in a multi-tenant building additional information may be required. Contamination throughout a structure is a concern in multi-unit commercial complexes where emissions from one unit can impact neighbouring units (where the neighbouring unit is within the same structure as the emission source) through air intakes, open doors or windows. For additional information please refer to Ontario Regulation 419/05 section 9 and the *Guideline A-10: Procedure for Preparing an Emission Summary and Dispersion Modelling (ESDM) Report* [PIBS 3614].

## **Form Section 5.2: Facility Information – Noise and Vibration**

If your ECA Application relates to a project that has noise emissions there are two subsections on the Application Form that you must fill out:

- Noise Assessment (Form Section 5.2.1)
- Equipment Subject to Noise Review (Form Section 5.2.2)

Note that all applicants should consider if noise may be an issue for their proposal regardless of whether the proposal falls under EPA section 9, section 27 or OWRA section 53.

### **Form Section 5.2.1: Noise Assessment**

Answer Yes, No or N/A to each question related to noise assessment. If the Primary Noise Screening Process is not applicable to your proposal, you have a choice of using the Secondary Noise Screening Process, or preparing and submitting an Abbreviated Acoustic Assessment Report or Acoustic Assessment Report.

**TIP:** See Part C, section 6.3 for more information on what type of noise assessment may be appropriate for your proposed activity. Note that the Primary Noise Screening is only available to certain NAICS codes, but any proposal may use the Acoustic Assessment Report.

### **Form Section 5.2.2: Equipment Subject to Noise Review**

You must check off all categories of equipment that are part of your project that are subject to noise review and indicate the number of pieces of each type of equipment that you checked. Sample of equipment that is subject to noise review



is included in *Secondary Noise Screening Process for section 9 Applications, Supplement to Application for Approval [PIBS 6888]*. Note: If you add new noise generating equipment this must be considered and total noise must be re-evaluated.

## Form Section 5.3: Facility Information – Sewage Works

If your ECA Application involves sewage works there are three subsections on the form that you must fill out:

- Facility Type (Form Section 5.3.1)
- Servicing (Form Section 5.3.2)
- Sewage Servicing for Waste Disposal/Landfill Sites (Form Section 5.3.3)

The information in this section of the form details the types of sewage works that are part of your proposal and the areas they will service.

Two of the categories: *Sewage Treatment Plant* and *Stormwater Management Facility* represent general types of sewage works and not necessarily stand-alone plants or facilities. Select the appropriate type and sub-type based on the equipment in your proposal, if applicable.

Fees are based on categories of magnitude of your proposal, for example, *new*, 1, 2, 3 and 4. See the embedded help in the form for more information.

## Form Section 5.4: Facility Information – Waste Disposal Site

If your ECA Application involves a Waste Disposal Site, there are four subsections that you must fill out:

- Facility Description – Waste Site (Form Section 5.4.1)
- Waste Transfer and/or Processing (Form Section 5.4.2)
- Thermal Treatment Facility (Form Section 5.4.3)
- Landfill Site (Form Section 5.4.4)

These sections of the form require information that defines the operation and capacity of the Waste Disposal Site, including the types and amounts of waste that are proposed to be managed, transferred, processed, disposed of, etc., at the site.

This guide harmonizes the terminology used in previous guides and forms to describe the types of waste. The following chart illustrates how the previously used terms are related.

## Form Section 5.5: Facility Information – Waste Management Systems

For ECA Applications involving a Waste Management System there are eight subsections to consider, though not all of them apply to every applicant:

- Fleet List (Form Section 5.5.1)
- Vehicle Information (Form Section 5.5.2)
- General Waste Management System (Form Section 5.5.3)
- Soil Conditioner Waste Management System (Form Section 5.5.4)

Table 8

Terminology	Includes:	Notes:
<b>Subject Waste</b>	Liquid industrial waste	All these terms are defined in O. Reg. 347 R.R.O. 1990
	Hazardous waste	
<b>Non-subject Waste</b>	Municipal waste	This term is defined in O. Reg. 347 R.R.O. 1990. Has also been called: Municipal (non-hazardous) waste
	Other liquid waste	This is to capture any liquid waste that is not subject waste

- Hauled Sewage (Septage) Waste Management System (Form Section 5.5.5)

**TIP:** See table 8 below for an explanation of the terminology changes throughout the waste sections.

## Form Sections 5.5.1 and 5.5.2: Fleet List and Vehicle Information

In these sections of the form you must identify all vehicles and equipment to be used in the operation of the Waste Management System, describe their ownership and insurance. If more space is required than what is provided in the form, attach to the application a separate list that includes all of the vehicle information.

## Form Section 5.5.3: General Waste Management System

In Section 5.5.3 of the Application Form you should indicate if you transport waste to a ministry-approved Waste Disposal Site in Ontario and if you transport waste to Waste Disposal Sites or facilities outside Ontario. If you transport waste out of Ontario you must list the province or state destination. Note that you are required to notify each province or state regulatory agency where waste is being transported to.

## Form Sections 5.5.4: Soil Conditioner Waste Management System

You are required to provide information about transporting soil conditioners to a site for spreading on land (if your project involves a Soil Conditioner Waste Management System). These sections apply only if spreading on land.

Soil conditioner is waste that includes processed organic waste and non-agricultural source materials (NASM) that are intended for land application on agricultural or non-agricultural sites to improve soil characteristics for crop or ground cover growth. Processed organic waste is defined in Ontario Regulation 347 R.R.O. 1990 under the EPA as waste that is predominantly organic and has been treated by aerobic or anaerobic digestion or other means of stabilization. NASM is defined in Ontario Regulation 267/03 under the Nutrient Management Act, 2002 (NMA) as material that is not from an agricultural source and that is capable of being applied to land as a nutrient. Examples of processed organic waste and NASM include off-spec compost, pulp and paper biosolids and sewage biosolids.

**TIP:** Note that information submitted in the ECA Application Form is for the purposes of applying for an ECA for the management of soil conditioning waste that will be applied to land. Such an ECA will not cover the approval required for the site where the waste is spread. The sites where soil conditioners are applied to the land must be operated either under an ECA authorizing land application or must be established in accordance with the NMA.

Sites operating under the NMA may require preparation of a NASM Plan to be registered with, or approved by, the Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA) and must follow all applicable requirements under the NMA and Ontario Regulation 267/03. For information on whether an ECA, under the EPA, or a NASM Plan, under the NMA, is required for a particular site receiving soil conditioner for land application, contact the ministry district/area office responsible for the area in which the site is located.

**TIP:** A map showing the district/area office coverage areas is available on the ministry website at: [www.ene.gov.on.ca/environment/en/about/regional\\_district\\_offices/index.htm](http://www.ene.gov.on.ca/environment/en/about/regional_district_offices/index.htm).

When a site where the waste is spread is approved by the District Manager, the site becomes part of the Waste Management System ECA issued for the hauling of these wastes.

## Form Section 5.5.5: Hauled Sewage (Septage) Waste Management System

You are required to provide information about transporting hauled sewage (septage) to a hauled sewage disposal site (if your project involves a hauled sewage Waste Management System).

Hauled sewage (septage) is sewage removed from portable toilets, on-site septic tanks or holding tanks for off-site disposal. Ontario Regulation 347 R.R.O. 1990 under the EPA requires portable toilet waste to be treated before land application. Information submitted in the ECA Application Form is for the purposes of applying for an ECA for the management of hauled sewage. You must have a separate ECA for each Waste Disposal Site at which you intend to dispose of hauled sewage. If the hauled sewage is intended for application on agricultural fields you will also need an additional approval from the ministry's district office where the agricultural field is located. Alternatively, if the hauled sewage is intended for treatment and effluent discharge to the natural environment you

must have approval for the sewage works also. Note that other approvals, permits, etc., may also be required.

### In-transit Storage – Hauled Sewage

In-transit storage means the temporary storage of hauled sewage during transportation, prior to final disposal at a sewage treatment plant, spreading field or other Waste Disposal Site. This does not encompass storage of hauled sewage over longer time periods, such as winter storage. In-transit storage must be located at the truck yard that is part of the Waste Management System, and the yard must be for the exclusive use of trucks that form part of that system. No sewage hauler may deposit waste at a storage facility that is not part of the hauler's Waste Management System. Prefabricated tanks for in-transit storage must conform to requirements for a Class 5 Sewage System under the Ontario Building Code, or the CSA standard B66-10 *Design, material, and manufacturing requirements for prefabricated septic tanks and sewage holding tanks* ([shop.csa.ca/en/canada/plumbing-products-and-materials/b66-10/invt/27011162010/](http://shop.csa.ca/en/canada/plumbing-products-and-materials/b66-10/invt/27011162010/)). In-transit storage facilities built on site must be certified by a professional engineer. To ensure that the storage facility is used for in-transit storage only, it must be completely emptied every two weeks.

To incorporate in-transit storage into your Waste Management System ECA, you must obtain approval from the ministry. The terms and conditions of the approval will require you to operate the storage facility so as to prevent spills and adverse effects and you must maintain records to demonstrate compliance with ministry requirements.

You must provide financial assurance if you are involved in in-transit storage (see Guideline F-15 Financial Assurance).

### In-transit Processing – Hauled Sewage

In-transit processing and treatment means processing of hauled sewage during transportation, prior to final disposal at a spreading field or other Waste Disposal Site. Processing and treatment (such as aerobic or anaerobic digestion, dewatering and lime stabilization, or other means of stabilization) will be allowed to take place within the approved Waste Management System. The terms and conditions of the ECA will require the owner to operate the storage facility to prevent spills and adverse effects and the owner or operator must maintain records to demonstrate compliance with ministry requirements.

Note that financial assurance is required if the processing occurs in storage tanks referenced above, but not if the processing occurs in trucks (see Guideline F-15 Financial Assurance ).

## Form Section 5.6: Facility Information – Mobile Waste Processing

If your ECA Application involves a mobile waste processing system there are two subsections that you must fill out:

- Mobile Waste Management System Process and Equipment Description (ECA Application Form Section 5.6.1)
- Equipment Information (ECA Application Form Section 5.6.2)

**TIP:** See table 8 in section 5.5 for an explanation of the terminology changes throughout the waste sections.

Approved mobile waste processing units may operate at sites where waste is generated or at already approved fixed Waste Disposal Sites, as long as the Waste Disposal Site is approved to accept the type of waste and is approved for the type of waste processing that is to be undertaken by the mobile unit.

Waste Management System approvals for mobile waste processing operations may operate at an individual location for a limited time only, where the time limit is technology specific. If you will operate for a longer period, you may need a different approval. Typically, an ECA for a mobile waste processing operation will include a restriction on the maximum number of days in a calendar year that the equipment may operate at each location, for example, the ministry generally limits it to 60 days, though the Director will consider extending the period on a case-by-case basis. If, for example, equipment or other treatment technologies are being used at a location for contaminated soil bioremediation, the Director might extend the period if it takes longer to carry out such activities.

## Form Section 5.7: Facility Information – Cleanup of Contaminated Sites

If your ECA Application involves cleanup of a contaminated site, you must fill out the information here. This section applies for both stationary, site-specific proposals as well as mobile proposals. The information will classify what type of cleanup you are proposing to do and what type of contaminants will be addressed. Note that depending on the discharges associated with your proposal, you may need to also select another media in Section 2 of the form and supply technical information for those discharges. For example, if you are extracting the contaminant from the ground, cleaning the soil and discharging to the air, you may also have to provide an a Design Report for Cleanup of Contaminated Sites.

# Supporting Documentation and Technical Requirements

## Part C of this guide explains:

- that it is your responsibility to specify documents that you consider confidential
- what makes an application one of high quality
- what should be included in the detailed project and process description and site plan
- by media, the specifics of what must be included in various technical documents that you must include with your ECA Application

## Application Form Section 6 – Supporting Documentation

Section 6 of the ECA Application Form relates to the specific technical documents you must submit as part of your application. The information in these technical documents should provide further description and explanation of the activity that is the subject of your application, for example, equipment involved, processes, design, etc.

**TIP:** These documents also explain the environmental impacts of the activities and, where necessary, how the activity conforms to applicable regulations, mitigation measures, etc.

In general, for any proposed activity, the ministry is interested in pollutants or contaminants that may be discharged from the activity to the natural environment. This may mean assessing your proposed activity and taking into account all media (air, noise and vibration, sewage and waste) in terms of:

- the quantity and quality of pollutants and contaminants that are input and discharged,

- the processes involved that manage or mitigate the pollutants and contaminants and,
- the final discharges from your proposed activity.

All projects may be looked at in this way in order to understand what type of review is needed to assess the proposed project. The nature of the discharges generally indicates what type of activity you have and whether an approval is required under section 9 of the EPA, Part V of the EPA or section 53 of the OWRA.

Depending on the type of discharges and how they are managed or mitigated, different technical requirements will apply. This guide and previous guides have dealt with these types of information through various reports tailored for different types of activities. For example, in order to describe discharges to the atmosphere, an emissions summary dispersion modelling (ESDM) is used, but a different type of modelling is used for stormwater flows. As well, the ESDM report would describe any mitigation measures such as pollution control equipment, while, for waste projects, a design and operations report describes how the waste disposal site is designed in order to manage the pollutants from waste. Once you know what discharges are involved in your proposed activity, you can use this section to understand which technical requirements apply to you.

This section describes different types of technical requirements that are specific to different types of discharges. The information in these technical documents should provide further description and explanation of the activity that is the subject of your application. For example, equipment involved, processes, design, etc. For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

## Confidentiality

If you consider any of these documents to be proprietary in nature you must clearly identify the specific piece of the documentation that is to be considered confidential. You must also provide a reason for the confidentiality request.

Please note that items marked confidential may still be requested and disclosed through a Freedom of Information (FOI) request. The FOI process considers issues such as proprietary information, security and public safety. The ministry will handle such requests based on the FOI process requirements.

## Applications of High Quality

In general, a high-quality application will present the pertinent information in a logical and easy-to-follow manner and have ensured that errors, mistakes and omissions are caught. Such an application allows the ministry to focus on the technical aspects of your application rather than spending time trying to find and understand the data and correspond with your technical contact. For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

This guide has highlighted specific content that is required for the ministry to understand your project, its context and the technical aspects. Any information that is key to this should not be buried in the application, but should be easy to find, for example, through use of clear headings and titles, legibility and use of language.

While it is normal to have errors and mistakes in the development of the large reports required for an application, it is possible to have in place processes and procedures designed to identify and correct mistakes, thereby reducing the chances errors are made. A best practice for creating documents and reports is to have one person prepare the document and have a different person verify that the information is correct. Of course, both the preparer and the verifier should have experience and/or training specific to the work being prepared and checked. This practice, usually shown by a dual *sign-off* may be applied to the entire report, drawings, specific key tables and figures. Applications should show evidence of such a practice or equivalent to ensure high quality.

## Form Section 6.1: Supporting Documentation and Technical Requirements – General

The checklist in this section reflects the documents that have been listed throughout the application form, for example, proof of legal name, copies of permits, etc. In general, these items are not media specific and could apply to any proposal. Two of the documents are minimum requirements under the ECA Application Regulation. The specifics are described below.

You must also include the signed checklist provided in *Guideline A-10: Procedure for Preparing an Emission Summary and Dispersion Modelling (ESDM) Report* [PIBS 3614] if your application includes an ESDM report.

## Detailed Project and Process Description

You must provide a detailed project and process description as required by the ECA Application Regulation. This description will provide the context for your proposal and the main details that will impact the scope of review. A summary of this must be provided in the application form (see Part B, “Project Description Executive Summary”) The detailed project and process description should be clearly labelled in the application package. The description should include:

1. A description of the proposed activity that is the subject of the proposal. This is a description of the specific thing that is covered by section 9 of the EPA, Part V of the EPA or section 53 of the OWRA. This description should also include the process the proposed activity is a part of.

**TIP:** For example, if your activity is a proposed Industrial Sewage Works that would treat the process water discharge from a planned expansion of an animal feed production line, the description should include the main equipment and processes involved in the sewage works and the animal feed production line because that is the source of the sewage.

The description should also include a process flow diagram or a schematic, whichever is more appropriate, of the process that the activity is a part of. Such a diagram should visually show the movement of the substance at each stage, for example, how it enters, whether it is created, destroyed, transformed or emitted, how it leaves and final status.



**TIP:** For example, if your proposal is for new pollution control equipment, the process flow should show the process that produces the contaminants, how they are treated by the equipment, and subsequent discharges, not just the processes in the control equipment.

Note that for municipal and private sewage works, further details on how to describe the works for location and identification are explained in the section Detailed Description of Proposed Works.

2. If your proposed activity is part of a larger operations at the same site, include a description of the business and operations at the location of your proposed activity. Often, proposals relate to activities that will take place within larger facilities or sites, for example, the addition of a piece of equipment to an existing manufacturing facility or an expansion of an existing Waste Disposal Site. The description should include an explanation of the general business at the site, for example, the manufacturing facility that builds engines. The description should also identify what is existing and what is planned.

**TIP:** For example, if you have an animal feed production facility and you are planning to expand the facility to accommodate the production of a new type of animal feed, your description should clearly describe and distinguish the existing business of the site (animal feed production) and the planned expansion (new production line to process and manufacture cat food).

3. The activity description should also include specifics of how the activity operates. This includes the operating days and hours. Note that these should reflect conditions when your proposal is implemented, for example, the days and hours that the facility will be operating and not the time of construction.

You should also include key information on the operating parameters related to the activity that defines the operating envelope of the activity. These are parameters that define the limitations of the activity in the context of its main function. The specific parameters will depend on the type of activity. Some examples are:

- Manufacturing plant – amount of product that is built; the amount of raw material that can be managed; the amount of contaminant that the control equipment can handle.

- Waste Disposal Site or management system – amount of waste that can be handled, processed, transferred, etc; amount of land; life expectancy of the site.
  - Sewage works – type or source of sewage; treatment or receiving capacity of the works.
4. A description of the main discharges to the natural environment and any existing or proposed monitoring programs or emission control equipment or measures related to the discharges. By discharges, it could be:
    - contaminants to the atmosphere or ground
    - quality and quantity of sewage
    - type, category, class, characteristics and quantity of waste.

## Site Plan

Under the ECA Application Regulation, you must provide a site plan for all applications, with exceptions for mobile equipment and Waste Management Systems as noted below.

The site plan may be a set of plans or drawings that collectively should show the geographic location of the proposed activity. It should also clearly show geographic and structural features that may affect the activity or the emissions from the activity. The site plan must, at a minimum, include:

- The boundary of the site with adequate geographic coordinates to be able to accurately describe the boundary and locate the site. If your proposal is for something that is less than the entire site, for example an expansion to a sewage works site, the site plan should show the entire site, not just the expansion.
- The location on the site of any buildings, structures, roads, railway tracks, utility corridors, paved areas, bermed areas, site fencing and pollution control devices located at the project location. Generally, all structures that are on the site. Also note the main access to the site.
- The location of anything (plants, structures, equipment, etc.) that is related to a discharge. For example:
  - Plants, structures, equipment, etc., that discharge to the atmosphere (air emissions, noise or vibration).
  - Stationary structures, things, or areas where waste is deposited, disposed, handled, stored, transferred, treated or processed.
  - Areas of sewage works.
- If the site crosses a municipal boundary, the site plan should show the municipal boundaries.



- Clear indication of the area of proposed activity, by, for example a circle, or arrow, or some distinctive marking.
- The distance and relationship between the activity location and any of the following, if the distance is 125 metres or less:
  - The portion of the Oak Ridges Moraine area that is subject to the Oak Ridges Moraine Conservation Plan,
  - The Niagara Escarpment Planning Area,
  - The Protected Countryside, that is, the Greenbelt, or
  - The Lake Simcoe watershed.

Additional specifics of what you should include in your site plan depend on the type of project, for example, which buildings and structures should be included. For more information on what to include in the specific site plans, depending on the project type, see the sections of the guide listed in table 9 below:

A site plan should be drawn to scale and must indicate geographic north and all units of measure should be displayed in metric units.

**IMPORTANT:** For mobile equipment, instead of a site-specific plan you should include a plan of the typical setup. This plan would show, if applicable, the relative location and placement of the pieces of equipment to one another and the location of discharges.

For Waste Management Systems specific to collecting, handling and transporting waste, for example, waste haulers, no site plan is required.

Table 9

Project Types	Where in this Guide to Find Site Plan Information
<b>Projects that have air emissions</b>	Included in <i>Guideline A-10: Procedure for Preparing an Emission Summary and Dispersion Modelling (ESDM) Report</i> [PIBS 3614e03]
<b>Noise and Vibration</b>	<u>Form Section 6.3.</u>
<b>Industrial Sewage Works</b>	<u>Form Section 6.4.</u>
<b>Municipal or Private Major Sewer Works – as part of the final plan</b>	<u>Form Section 6.4, Final Plans.</u>
<b>Landfill Sites – as part of the design and operations report</b>	<u>Form Section 6.5, Design and Operations Report for Landfill Sites.</u>
<b>Thermal Treatment Facilities – as part of the design and operations report</b>	<u>Form Section 6.5, Thermal Treatment Facilities.</u>
<b>Waste Transfer Station – as part of the design and operations report</b>	<u>Form Section 6.5, Waste Transfer Station.</u>
<b>Waste Processing Sites – as part of the design and operations report</b>	<u>Form Section 6.5, Waste Processing Sites.</u>
<b>Composting Site – as part of the design and operations report</b>	<u>Form Section 6.5, Composting Sites.</u>

## Form Section 6.2: Supporting Documentation and Technical Requirements – Air

For projects governed by EPA section 9 that have emissions to air you must include with your application specific models and assessments. In Section 6.2 of the Application Form the ministry has basically provided a checklist of all the supporting documents required with regard to air emissions. For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

## Emission Summary and Dispersion Modelling (ESDM) Report

To obtain approval for an activity described in section 9 of the EPA you must demonstrate compliance with Ontario Regulation 419/05, including compliance with the air standards at points of impingement (POI) which are defined in section 2 of the regulation, through the preparation of an Emission Summary and Dispersion Modelling (ESDM) Report. The ESDM report compiles all air emissions from a facility and assesses their impact on the environment against ministry standards/guidelines using air dispersion models. The *Guideline A-10: Procedure for Preparing an Emission Summary and Dispersion Modelling (ESDM) Report* [PIBS 3614e] provides more information on how to prepare this report. The ESDM report must include everything set out in Ontario Regulation 419/05, section 26.

## Relief when Preparing an ESDM Report

Subsection 22(2) of Ontario Regulation 419/05 allows you to focus the ESDM report on the contaminants that are relevant to the application for an ECA. You must include an assessment of all other sources that emit contaminants in common with the sources that are the subject of the application itself. Additional information on this topic is included in the Procedure Document. Further, subsection 22(3) of the regulation allows the Director to relieve person(s) preparing an ESDM report from obligations associated with any of the specific requirements for an ESDM report under subsection 26(1) where the Director is of the opinion that compliance with the provision is not necessary to understand the impact of the discharges of one or more contaminants. The following are examples of applications where there could be reduced requirements associated with ESDM reports:

- You are applying for an Administrative Amendment to an Existing ECA (for example, for a business name change);
- Your project involves subsurface remedial technologies that require an ECA and have no air emissions, for more information contact a client service representative;
- You are applying for an ECA for a facility that is registered or that is the subject of an application for registration under the Ontario Regulation 419/05 technical standard;
- You are applying for an ECA for a facility that has Environmental Activity and Sector Registry (EASR) registration(s);
- The equipment identified has known and predictable environmental impacts, such as:
  - emergency generator sets installed at commercial, institutional and municipal facilities,
  - automotive paint spray booths,
  - combustion equipment installed at commercial, institutional and municipal facilities,
  - cooling towers,
  - laboratory fume hoods.

Note that the ECA application for equipment identified as having known and predictable impacts may require the completion and submission of equipment-specific data sheets.

Where a site-wide ESDM report is required in support of an application for an Environmental Compliance Approval (ECA) for a facility that has both Environmental Activity and Sector Registry (EASR)-eligible sources and sources of emissions to the air that require an ECA. For these facilities the applicant must prepare a site-wide ESDM report, demonstrating that the facility is capable of operating in compliance with the applicable limits prescribed in Ontario Regulation 419/05.

In cases where the EASR-eligible sources do not make a significant contribution to the facility's site-wide air emissions, they should be identified as insignificant and no further assessment of these sources would be required.

## Electronic copy of the Dispersion Modelling input and output files

Ontario Regulation 419/05 sections 6 to 17.1 require that you use an approved dispersion model and prescribe the required inputs for approved dispersion models. Copies of the dispersion models referred to in the regulation are available through the ministry's website or the ministry's Public Information Centre.

The dispersion modelling results must be included in an ESDM report per Ontario Regulation 419/05 subsection. 26(1). This includes, but is not limited to, the requirement to include an electronic copy of the input files that were used with, and the output files that were produced by, the approved dispersion models in the ESDM report. Further information on these requirements can be found in the Procedure Document. In addition, *Air Dispersion Modelling Guideline for Ontario* [PIBS 5165] (ADMGO) provides guidance regarding complying with the requirements of Ontario Regulation 419/05 sections 6 to 17.1 and should be used in conjunction with the Procedure Document.

## Contaminants with No Ministry POI Limits

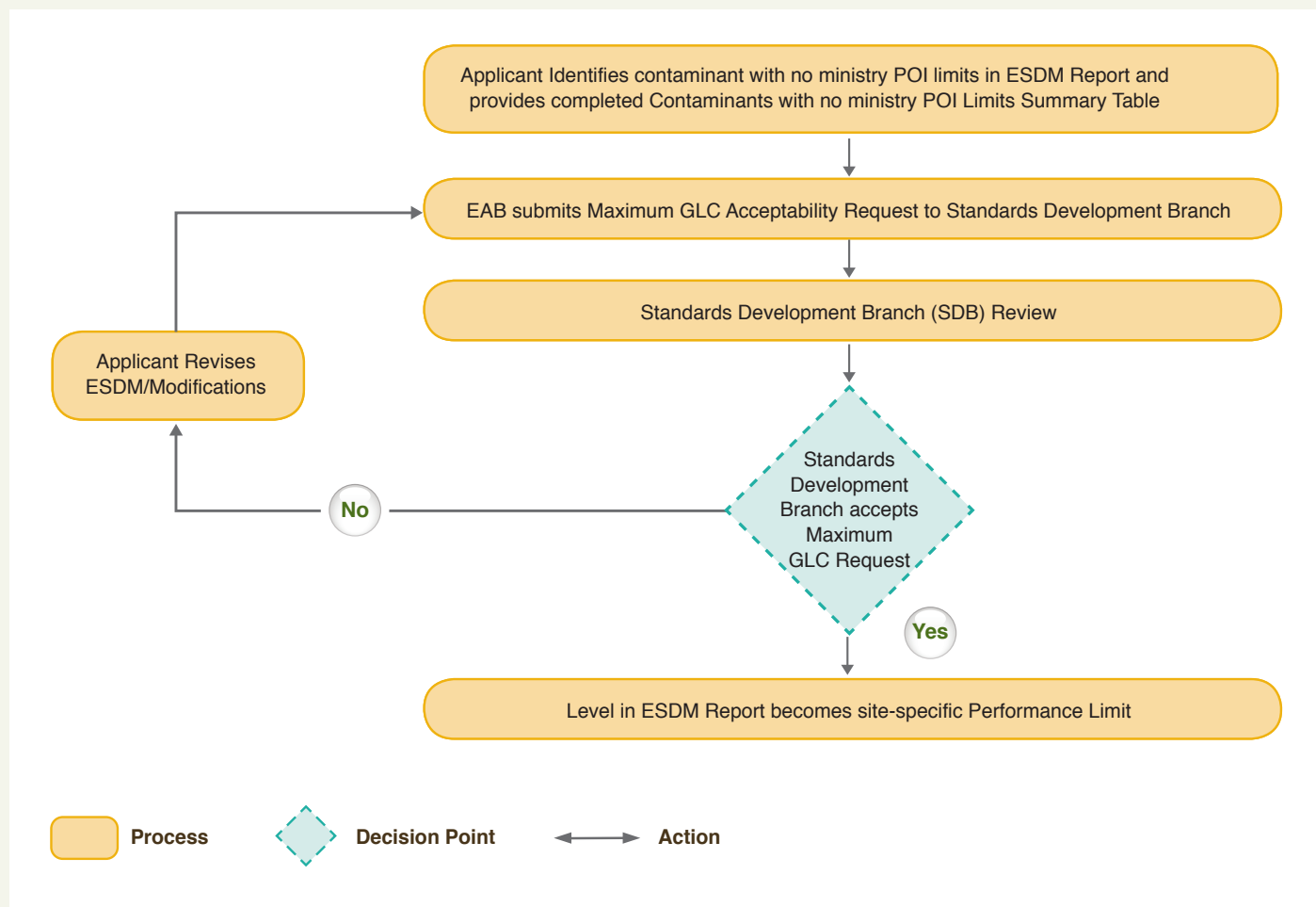
Ministry Point of Impingement (POI) Limits are available for approximately 350 contaminants including standards (POI Standards) listed in Ontario Regulation 419/05, Schedules 2 or 3 and POI guidelines. The ministry POI limits are provided

in the publication: *Summary of Standards and Guidelines to support Ontario Regulation 419: Air Pollution – Local Air Quality* [PIBS 6569] available on the ministry’s website under *resources* section or directly at: [www.ene.gov.on.ca/environment/en/industry/standards/industrial\\_air\\_emissions/air\\_pollution/STDPROD\\_078053.html](http://www.ene.gov.on.ca/environment/en/industry/standards/industrial_air_emissions/air_pollution/STDPROD_078053.html).

However, there are many more compounds that meet the definition of a contaminant under the Ontario EPA than there are contaminants with ministry POI limits. Persons preparing an ESDM report are accountable for the assessment of all contaminants that are discharged from the facility regardless of whether a ministry POI limit is available.

The ministry has published the *Jurisdictional Screening Level (JSL) List – A Screening Tool for Ontario Regulation 419: Air Pollution – Local Air Quality* [PIBS 6547] to assist in the assessment of contaminants with no ministry POI limits.

Figure 2: Maximum Ground Level Concentration Acceptability Request



If a contaminant does not have a ministry POI Limit and does not appear on the JSL list, it requires a separate review by the ministry's Standard Development Branch. The review is initiated when the applicant completes and submits a *Supporting Information for a Maximum Ground Level Concentration (GLC) Acceptability Request for Compounds with no Ministry POI Limit: Supplement to Application for Approval, EPA section 9 [PIBS 4872]* along with the required supplementary material. Please note that there is an additional fee associated with these requests. Further information related to this topic is included in the Procedure Document.

Figure 2 shows the process to obtain a site-specific performance limit. Additional information on containments with no POI see Part D: Contaminants with no Ministry POI limits.

## Form Section 6.3: Supporting Documentation and Technical Requirements – Noise and Vibration

You must assess the noise and/or vibrations from the facility **unless** your application is for one of the following:

- An Administrative Amendment to an Existing ECA, such as a correction or name change that does not require technical review.
- An Amendment to an Existing ECA for a modification that does not have the potential to change the noise emission from the facility, for example, a paint reformulation.
- Equipment that does not have the potential to generate noise emissions, for example, a storage tank or equipment operating indoors in a place without any vents or openings to the outdoors.

The application should also provide detailed information on the environmental noise climate surrounding the facility and should:

- Show on the zoning map (required under ECA Application Form Section 4.3) the surrounding area. The zoning map should show at least a radius of either 500 metres or 1,000 metres, depending on the type of equipment and nature of the activities taking place at the facility. Note that if no zoning map is available, this information may be included in the site plan.
- Indicating, if relevant to the calculations, the topography and nature of the neighbourhood surrounding the facility, including the location of adjacent buildings and structures and the nearest Point of Reception (POR). This may be shown on the scaled area location plan (See ECA

Application Form Section 4.1). The scaled area location plan should also cover a radius of either 500 metres or 1,000 metres depending on the type of equipment and nature of the activities taking place at a facility.

- The location of the nearest POR that may be impacted by the facility in relation to the equipment/facility must be clearly shown on the scaled area location plan. POR include any of the following existing or zoned for future use premises:
  - permanent, seasonal or rental residences;
  - hotels/motels;
  - nursing/retirement homes;
  - hospitals;
  - campgrounds; or
  - noise-sensitive buildings such as schools, day-care facilities and places of worship.

The ministry has developed a series of Noise Pollution Control (NPC) guidelines and two noise screening documents (primary and secondary) that provide a framework to determine if noise emissions from a facility are causing, or are likely to cause, an adverse effect.

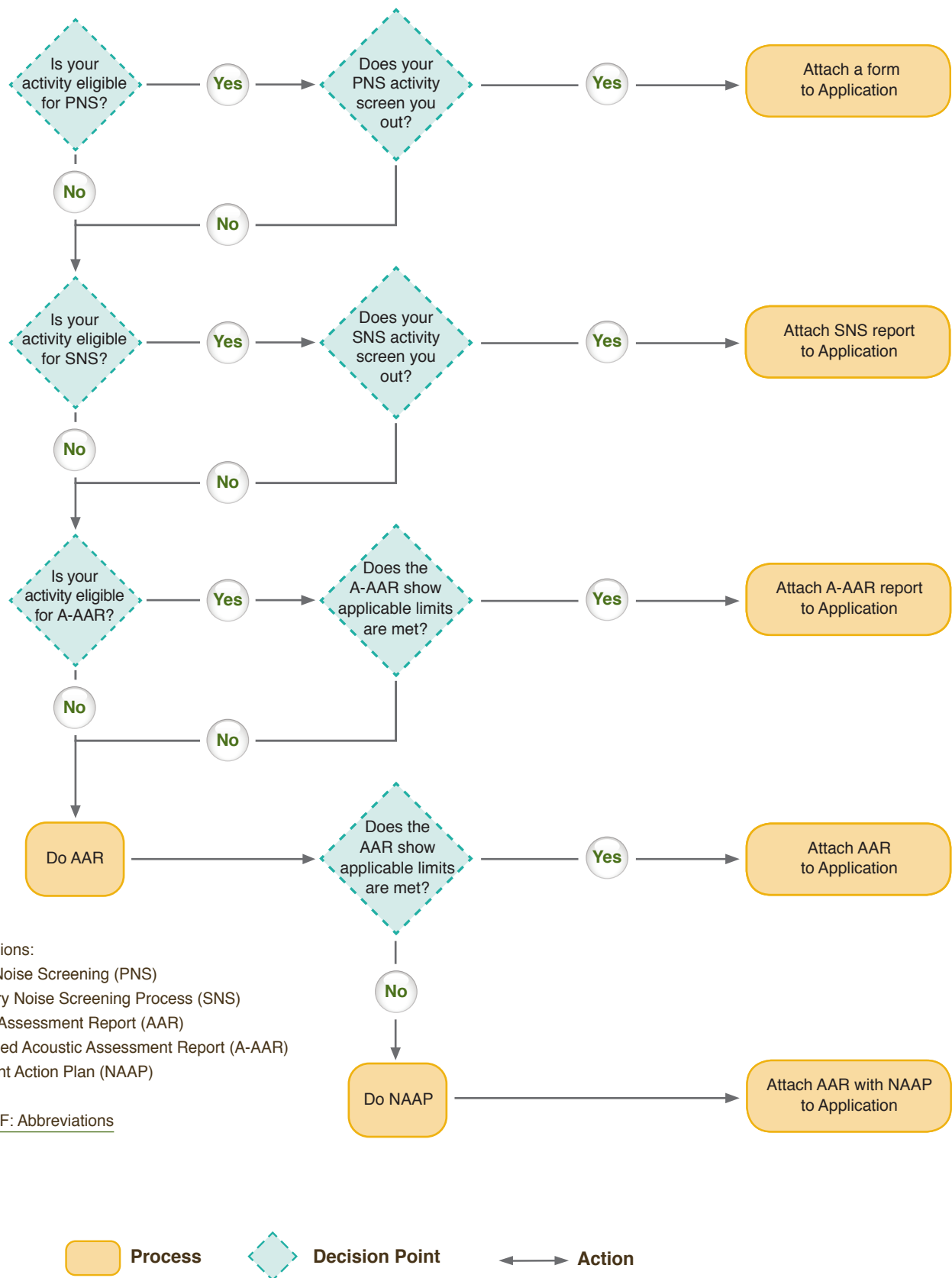
The default requirement of an application where noise is assessed is an Acoustic Assessment Report (AAR). However, depending on your project you may be eligible to submit an abbreviated AAR (A-AAR). Further, you may use the primary noise screening (if your proposed activity falls under certain NAICS codes) or the secondary noise screening (subject to eligibility requirements) to try to screen out the proposed activity. If your proposed activity is not screened out, however, you must then provide either an Abbreviated Acoustic Assessment Report or an Acoustic Assessment Report. See below for discussion of these options.

In general, if a facility is closer to a POR than 50 metres (property line to property line), noise screening may not be used. Conversely, if a facility is well sited, located more than 1,000 metres from a POR, then a detailed noise assessment is not required. However, legislation gives the Ministry of the Environment Director the authority to request a noise assessment.

## Noise Screening Process

The noise screening process is based on confirming that there is a sufficient separation distance between a facility's noise sources and nearby PORs to ensure that the facility's noise emissions will not exceed the ministry noise guidelines.

Figure 3: Choosing a Noise Screening Option



Note that if the local ministry office indicates that the facility is an ongoing source of noise complaints, the Director may require an acoustic assessment, even if your application passes (in other words, screens out) based on the screening process,

If significant vibration sources, such as stamping presses or forging hammers, are present at the facility, then neither the primary nor the secondary noise screening process may be used and a detailed noise and vibration impact assessment is required.

The figure 3, on the following page is an overview of how you might decide which noise screening option is right for your proposal. At any point, you may choose to jump to the more rigorous A-AAR or AAR (this choice is not shown in the figure).

## Primary Noise Screening Process

The primary noise screening (PNS) process is designed so you can complete it without going through detailed calculations.

**IMPORTANT:** You may only use this if your proposed activity falls under certain NAICS codes.

The PNS process uses conservative assumptions regarding the likely noise sources present at the facility in order to calculate the minimum separation distance required to achieve compliance with ministry guidelines. When conducting primary noise screening you must follow the process detailed in: *Noise Screening Process for section 9 Applications – Supplement to Application for Approval* [PIBS 4871].

If the actual distance between the facility and the closest POR is greater than the calculated minimum required separation distance, then you need not conduct any further noise assessment (the facility is considered *screened out*). If your facility is screened out based on this process all you have to do is include with your ECA Application a signed primary noise screening form that was prepared in accordance with ministry guidance material.

If the closest POR is closer than the minimum required separation distance calculated in the primary noise screening, then further noise assessment is required. Applicants may choose to go through the secondary noise screening process or submit an Abbreviated Acoustic Assessment Report or an Acoustic Assessment Report.

## Secondary Noise Screening Process

The secondary noise screening (SNS) Process is more detailed than the PNS process, but significantly less intensive than preparing an Abbreviated Acoustic Assessment Report or an Acoustic Assessment Report. The SNS process has been designed to be completed by a competent practitioner with a rudimentary knowledge of acoustics and a basic understanding of applicable ministry noise guidelines, but who is not necessarily an acoustical consultant. When conducting secondary noise screening you must follow the process detailed in the *Secondary Noise Screening Process for section 9 Applications, Supplement to Application for Approval* [PIBS 6888].

The SNS process is less conservative than the PNS process since it takes into account the following site specific information:

- actual location of noise sources relative to the Point of Reception;
- effect of barriers breaking line-of-sight; and
- background noise from major highways/roadways.

If an application is screened out using the SNS process, then no further noise assessment is required. To satisfy the noise assessment requirements of the approval process, a signed SNS report that has been prepared in accordance with ministry guidance material must accompany the application.

If an application is not screened out by either the PNS or SNS process, then further assessment is required and an Abbreviated Acoustic Assessment Report or an Acoustic Assessment Report must be submitted with the application.

**IMPORTANT:** The SNS process may only use data from the ministry publication: *Noise Red Flag Tables* (available directly from the ministry) and manufacturers' published noise data. Sound data obtained by measurements at site are not acceptable for use in the SNS process.

## Abbreviated Acoustic Assessment Report

Some facilities that fail to screen out using the PNS or SNS process may have simple noise emissions that can be clearly shown to satisfy the applicable sound level limits without requiring the detail of an Acoustic Assessment Report (AAR). The Abbreviated Acoustic Assessment Report (A-AAR) has been developed to address these situations.



The intent of the A-AAR is to allow for the generation of a simplified AAR, which is less time-consuming to prepare and more straightforward to review. There are four conditions that must be met to determine whether an application may be a suitable candidate for an A-AAR. These four conditions are explained in detail in: *Guide for the Preparation of an Abbreviated Acoustic Assessment Report*, which must be followed by an applicant when conducting an abbreviated acoustic assessment.

It should be noted, however, that meeting the above conditions does not necessarily mean that you can use the A-AAR format. If the A-AAR is insufficient you may be required to submit an AAR.

## Acoustic Assessment Report

An Acoustic Assessment Report (AAR) is required for all applications that are required to demonstrate compliance with ministry noise guidelines (as outlined in the NPC documents) that have not screened out using either the PNS or SNS process and where an A-AAR was not performed or was not accepted by the Director.

Furthermore, note that an AAR is required if the applicant applies for an ECA with Limited Operational Flexibility. In such a case you cannot use a SNS process or A-AAR.

The AAR should be linked with the ESDM Report for consistency in identifying sources of air, noise and/or vibration emissions.

Where a site-wide AAR is required in support of an application for an (ECA) for a facility that has both Environmental Activity and Sector Registry (EASR) eligible sources and sources of noise that require an ECA. For these facilities the applicant will have to prepare a site-wide AAR demonstrating that the facility is capable of operating in compliance with the applicable noise limits at all neighbouring receptors. If the EASR-eligible sources do not make a significant contribution to the facility's site-wide noise emissions, they should be identified as insignificant and no further assessment of these sources would be required.

An AAR is based on a detailed noise review of the noise sources at the facility and their impacts on neighbouring points of reception. An AAR must include sufficient information and analysis to demonstrate compliance with ministry noise guidelines. Generally, conducting a noise assessment and preparing the accompanying AAR requires the assistance of an acoustical consultant.

If the AAR shows that the facility is not capable of operating in compliance with the noise limits set in *NPC-205: Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban)*

[PIBS 3406] (NPC-205) and *NPC-232: Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)* [PIBS 3405] (NPC-232), as applicable, then the AAR must include a noise abatement action plan (NAAP) to achieve compliance with the governing noise limits. The NAAP should include, but is not limited to, the following:

1. required noise control measures (both physical and administrative) to reduce the noise emissions from the facility to comply with the limits set in NPC-205 and/or NPC-232, as applicable; and
2. a timetable for implementation of the noise control measures (both physical and administrative), including the date for achieving compliance with the limits.

The AAR must be prepared in accordance with:

- *NPC-233: Information to Be Submitted For Approval Of Stationary Sources Of Sound* [PIBS 3404]; and
- Appendix A (*Supporting Information for an Acoustic Assessment Report or Vibration Assessment Report Required by a Basic Comprehensive C of A*) of the *Basic Comprehensive Certificates of Approval (Air): User Guide* [PIBS 4391].
- Schedule B – Supporting Information for a preparation of the Acoustics Assessment Report

The ministry has provided an *Acoustic Assessment Report Check-List* [PIBS 5356] on our website that indicates the minimum required information. Applications that require an Acoustic Assessment Report must include a signed checklist.

## Vibration Assessment Report

If vibration sources are present at a facility that is included in your application you must include a detailed vibration impact assessment. For example, if your application involves a project that includes significant vibration sources, such as stamping presses or large rotating equipment, you may have to submit a vibration assessment.

Vibration Assessment Reports must be prepared in accordance with *NPC-233: Information to be Submitted for Approval of Stationary Sources of Sound* [PIBS 3404].

The purpose of the detailed vibration assessment is to demonstrate that the vibration levels produced by all sources within the facility under assessment, in combination with any vibration mitigation measures, do not exceed the ministry vibration guidelines at a POR.

The ministry has published the following outlining vibration guidelines for impulsive sounds:

- Publication NPC-207 draft technical publication *Impulse Vibration in Residential Buildings*, November 1983, as amended, supplementing the Model Municipal Noise Control By-Law, Final Report, August 1978, published by the ministry

For copies of the above publication, contact a client service representative.

For other sources of vibration you must use best practices.

## Form Section 6.4: Supporting Documentation and Technical Requirements – Sewage

ECA Application Form Section 6.4 describes the technical requirements for Industrial and Municipal Sewage Works. For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

Industrial sewage works are any works involving the collection, transmission, treatment or disposal of sewage generated from industrial activities. This could include projects to handle storm runoff, domestic sewage and process sewage from industrial sites. All other sewage works are referred to either as Municipal Sewage Works or Private Sewage Works.

If you are requesting an Approval in Principle for works where detailed engineering designs have not been finalized, that is, if you are seeking an ECA subject to approval of final plans and specifications, see Part E, Approvals in Principle of this guide.

**TIP:** For these applications the minimum information you must provide is outlined below under: Preliminary Engineering Report.

For projects that include sewage works, because various types of data allow for assessment of impacts to water, the technical information you must provide depends on the type of sewage works involved and the ministry may request additional information if necessary to review the application. All engineering design information you provide must be prepared and properly certified by a professional engineer licensed in Ontario.

The chart on the following page summarizes the types of reports and information required concerning different types of sewage works. It should be noted that the content of the

same type of report will vary depending on the type of sewage works the report relates to. For example, the contents of a design report for a municipal or private storm sewer project will have different specific requirements from a design report for industrial sewage works.

Details about the minimum information you must provide for the different types of technical reports or technical information listed on the chart below can be found under specific headings after the chart (Section 6.4).

Industrial Sewage Works are any works involving the collection, transmission, treatment, or disposal of sewage generated from industrial activities. Industrial Sewage Works include works to handle storm runoff, sewage from industrial sites and sewage from site remediation activities at industrial sites. Industrial sites are facilities located in industrial zones or facilities containing or constructed to be containing industrial operations, but located in areas with undefined zoning or without municipal zoning.

## Pipe Data Form

You must include the Pipe Data Form [PIBS 6238] if the sewage works involves storm sewers, ditches, sanitary sewers, forcemains and/or pumping stations(s).

## Application Requirements for Industrial Sewage Works

In addition to a completed ECA Application Form, you must provide the following additional technical documents, each of which are discussed separately below, when submitting an application for approval of an Industrial Sewage Works:

- Design Report
- Stormwater Management Plan
- Stormwater Management Report
- Environmental Impact Analysis
- Surface Water Impact Assessment
  - Groundwater Impact Assessment
  - Site Plan
- Sewage Quantity and Quality Characteristics
- Engineering Drawings and Specifications

Depending on the nature of your proposal, you may need to submit additional special information specific to the proposal. For example, if chemicals are to be stored on the site, you must include a spill prevention and containment plan as per Ontario

Regulation 224/07. Given the variety of proposals, the Director may also ask you to submit additional site-specific information. Remember, all engineering design information you provide must be prepared and properly certified by a professional engineer licensed in Ontario.

### Design Report for Industrial Sewage Works

You must provide the basis for design for all sewage works components. You must report the size of the unit, the value of all design variables used to determine that size and the design method or equation. You must support the value of all design variables by bench scale experiments or reliable literature sources. You must use standard design methods, though you may use new design methods if you can justify using them. The

design engineer responsible for the basis for design should be familiar with all ministry guidelines relating to the subject.

If the sewage works have potential to impact on other media, such as air, groundwater or land, your basis for design must cover the measures used to prevent or mitigate the impact of the sewage works on that medium. For example, the basis for design of a sewage lagoon must address the water tightness of the lagoon. In such a case you would have to also provide a geotechnical report and describe the design permeability, the construction materials you plan on using, the construction practices you will employ and the impact on groundwater of any residual seepage from the lagoon.

Table 10:

Outlines the technical requirements for ECA Applications involving Industrial, Municipal and Private Sewage Works.

Technical Requirement Section in Guide	Industrial Sewage Works	Municipal Sewage Works	Private Sewage Works
Pipe Data Form	If applicable (see section 5.3.1 of the ECA Application Form)		
Municipal responsibility agreement	Not applicable	Not applicable	<input checked="" type="checkbox"/>
Design Report	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Stormwater Management Plan	<input checked="" type="checkbox"/> (included in the Site Plan)	<input checked="" type="checkbox"/> (included in the Final Plans)	<input checked="" type="checkbox"/> (included in the Final Plans)
Stormwater Management Report	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (included in the Preliminary Engineering Report)	<input checked="" type="checkbox"/> (included in the Preliminary Engineering Report)
Preliminary Engineering Report	Not applicable	As included in the Design Report	Not applicable
Environmental Impact Analysis	If applicable		
Site Plan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (see section Final Plans)	<input checked="" type="checkbox"/> (see section Final Plans)
Sewage Quantity and Quality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (see section Design Report)	<input checked="" type="checkbox"/> (see section Design Report)

Technical Requirement Section in Guide	Industrial Sewage Works	Municipal Sewage Works	Private Sewage Works
Final Plans	Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Engineering Drawings and Specifications /Sewage Works – Specifications <sup>2</sup>	<input checked="" type="checkbox"/> See Engineering Drawings and Specifications	<input checked="" type="checkbox"/> (Either included in Final Plans or as separate section)	<input checked="" type="checkbox"/> (Either included in Final Plans or as separate section)
Detailed Description of proposed works (in addition to the detailed project and process description)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Yes

### Stormwater Management Report for Industrial Sewage Works

If your application involves stormwater management (quantity control, quality control or both), you must prepare a stormwater management report and provide it with your application. The information in your stormwater management report should include, but not necessarily be limited to, the following:

1. Identification of the drainage area and the effluent receiver (waterbody, stormwater management pond, sewers/ditch).
2. Summary of the design criteria (for example, major and minor flows; site-specific target flow rates; land use restrictions, that is, the maximum percentage of imperviousness; minimum watercourse buffer strips; required level of treatment; etc.) and identification of their sources (that is, Master Drainage Plan; Watershed Plan; and/or Sub-Watershed Plan) or names of the authorities (municipality, conservation authority, Ministry of Natural Resources, Ministry of the Environment) that established or approved the design criteria.
3. Summary of design storms and flows generated for pre-development, uncontrolled post-development and controlled post-development conditions with hydrographs, including the methodology used for calculations (computer models, rational method, runoff coefficients, etc.).

<sup>2</sup> The drawings and specifications may be provided as stand-alone documentation or as part of another document. See the sections below for more details. Select all the appropriate items in section 6 of the form regardless of how the drawings and specifications are submitted.

4. Hydraulic capacity of the receiving watercourse, swale, natural channel or existing storm sewers to accept the design flows, including water balance calculations for determining the receiving stream baseflow and assessment of impacts on the receiver.
5. Identification of the type of stormwater detention facility you propose, for example, rooftop, parking lot, underground storage (oversized sewer, detention tank), detention pond (wet and/or dry) or infiltration pond.
6. Identification of the type of stormwater quality control facilities you propose, for example, on-lot source control, infiltration (that is, perforated pipes, trenches, swales, basins, etc.), stormwater ponds (that is, wet, extended wet, extended dry), wetlands, disinfection facilities.
7. Description and design details (including calculations) of the stormwater management works, including minor and major stormwater conveyance systems and stormwater quantity and quality control facilities, together with the discharge control and emergency overflow features and any temporary and permanent erosion and sediment control facilities.
8. Hydraulic routing of the major (that is, 100-year or Regional) storms through the works, including hydrographs.
9. Detailed description of the proposed operation and maintenance procedures for the works.

### Environmental Impact Analysis for Industrial Sewage Works

In the Director's assessment of any proposed sewage works, the most important aspect of the environmental impact is the anticipated impact of the works' final effluent on the receiver

(that is, surface water body, land area, soil and/or groundwater) and its potential users.

It is your responsibility to assess the assimilative capacity and to determine the actual and potential uses of the intended receiver of the effluent from the proposed works. You must discuss the requirements for the assimilative capacity study with the ministry regional technical support section during a pre-application meeting with the ministry. From your analysis you must determine the effluent quality and discharge regimen criteria for the proposed works. You should determine the effluent criteria in consultation with staff of the technical support section of the appropriate regional office of the ministry because that office's agreement (in writing) with the criteria is a prerequisite for the Director's issuing of an ECA.

**Surface Water Impact** – for new or expanded facilities with a direct surface discharge (including direct discharges to wetlands), you must report the present downstream use and assimilative capacity of the receiver. You must discuss the requirements for the assimilative capacity study with the ministry's regional technical support section during a pre-application meeting with the ministry.

**Groundwater Impact Assessment** – you must undertake a groundwater impact assessment for all activities (production related or sewage works) that may impact in any way the groundwater, for example, material storage areas, disposal of sewage on land, seepage from lagoons or tailings basins.

The requirements for the groundwater impact assessment will vary from site to site and you should discuss this with staff during a pre-application meeting with the ministry.

### Site Plan for Industrial Sewage Works

Site plans should show geographic north and be drawn to a scale of approximately 1:5000 or larger and all dimensions and sizes should be in metric units. Included in the plans you should:

1. Identify property and municipal boundaries, roads, rail tracks.
2. Identify Waste Disposal Sites and temporary holding areas for waste.
3. Identify manufacturing, process, administrative, office and laboratory buildings and free standing process units.
4. Identify storage areas and loading/unloading areas.
5. Lay out all sewage treatment facilities including lagoons, ponds and tank sumps with clearly labelled incoming streams.

6. Identify all effluent streams, stormwater ditches and conduits; sewer systems (for example, sanitary, storm, process); open channels/ditches; emergency overflows; discharge points to, and intakes from, the local watercourses together with the direction of flow. All separate systems should be labelled clearly and differentiated from one another.
7. For the purposes of stormwater management, show all the catchment areas that drain into any proposed or existing stormwater management facilities, all areas that drain into neighbouring properties without treatment or quality control, the 100-year flood line, existing and proposed building facilities, water well locations, stormwater and other utility pipes, swales and municipal drains on roadways. The ultimate receiver should be shown or indicated, including its size, area and depth.
8. Identify the locations of existing or proposed sewage sampling points, sampling devices, auto-analyzers, and flow measuring devices. Where applicable you should note ministry Municipal Industrial Strategy for Abatement (MISA) control points.

Highlight the areas and components of the works under consideration for approval.

### Sewage Quantity and Quality Characteristics for Industrial Sewage Works

Regarding sewage quantity and quality characteristics, you should provide the following information:

1. A brief process description of the production operations, including names of raw materials, chemicals used or stored on the site and the finished products.
2. The characteristics of all main raw sewage streams as they enter the sewage works. In describing the characteristics for process sewage streams you must include the peak and average flow rate, temperature and the concentration of all design parameters that you know are present or for which a limit is prescribed in regulation.
3. The characteristics of cooling water streams. This information must include the peak and average flow rates, temperature, concentration of all cooling water additives and a list of all contaminants that may enter the stream through leaks or spills from the system. Where possible you should report the expected concentration of those contaminants that might enter the system through leaks and spills.



4. The characteristics of stormwater streams. This information must include the peak flow rate for the design storm, a list of contaminants that may be present and an expected range in concentration for each of these contaminants.

Note that for existing sources you should report concentrations based on monitoring results; if this is not possible, you may use best estimates.

### Engineering Drawings and Specifications for Industrial Sewage Works

Your engineering drawings should contain:

- a sewage works process flow diagram,
- piping and instrumentation diagrams, and
- plan and profile drawings for all treatment works.

The drawings should show all dimensions and capacities in metric units.

The process flow diagram (PFD) must include all treatment steps, the direction of flow of all sewage streams, recycle streams and waste streams, as well as the location of all chemical addition points. The PFD must also show the maximum and average flow rates of all streams entering and leaving each component of the works, as well as a mass balance for all design parameters around each treatment component.

The ministry requires piping and instrumentation diagrams (P&IDs) for the complete sewage works. P&IDs must include all controls, piping arrangements, pumps, valves and equipment capacities.

The ministry requires plan and profile drawings (PPDs) including sections for all major components of the treatment works. PPDs must verify that you incorporated all sizing and configuration requirements determined by the process design calculations (the basis for design) into the equipment design. Your PPDs must contain elevations for inlets, outlets, weirs, etc.

To provide a simplified overview of the works and their function, you should include a block diagram (process flow) showing the various flow linkages. Where the works are additions to existing systems you should highlight the new components on the various diagrams.

### Other Information

Depending on the nature of your proposal, you may need to submit additional information specific to the proposal. For example, if chemicals are to be stored on the site, you must

include a spill prevention and containment plan as outlined in Ontario Regulation 224/07.

## Application Requirements for Municipal and Private Sewage Works

The ministry realizes that the process of planning and engineering design of sewage works projects varies with the size and complexity of the undertaking and not all documents listed in Section 6.1.4 of the ECA Application Form may be appropriate for a particular project.

For example, the process of planning and design of complex municipal works such as new sewage treatment plants will involve preparation of a number of separate documents including an individual environmental assessment, a preliminary engineering report, a design report (the basis of detailed engineering design), final plans (engineering drawings) and specifications (construction process, materials and equipment).

This section of this guide includes information about the various types of technical documents and reports that businesses normally prepare in the process of the planning and designing complex sewage works. As noted, the exact information you must submit in support of your application may vary, but keep in mind it is your responsibility to provide all pertinent information with your application.

The following technical documents related to applications for Municipal and Private Sewage Works are discussed below:

#### a. Design Reports for Municipal or Private Sewage Works:

- Design Report for Sanitary Sewers
- Design Report for Storm Sewers
- Design Report for Sewage Pumping Stations
- Design Report for Stormwater Management
- Design Report for Sewage Treatment and Disposal Works

#### b. Preliminary Engineering Report

#### c. Environmental Impact Analysis

- Surface Water Impact
- Groundwater Impact Assessment

#### d. Final Plans

- Stormwater Management Plan
- Storm and Sanitary Sewers
- Major Sewage Works (Sewage Treatment and Disposal Facilities, Stormwater Management Facilities, Pumping Stations)



## e. Sewage Works – Specifications

### f. Detailed Description of Proposed Works

Remember that when requesting an Approval in Principle Subject to Final Plans and Specifications, special rules apply.

**TIP:** See Part E, Approvals in Principle for more information

### Municipal Responsibility Agreement – Private Sewage Works

If your proposal is for Private Sewage Works you must provide a signed Municipality Responsibility Agreement, which essentially ensures that the municipality will continue to maintain and operate the sewage works in case you are no longer able to do so. See *Procedure D-5-2 Application of Municipal Responsibility for Communal Water and Sewage Services* [PIBS 2169] for more information. Where municipal ownership of the private communal works cannot be achieved this issue must be addressed in pre-application consultation with the local district office of the ministry and resolved before submitting an application for approval of the works. If there is no municipality that can assume this responsibility the Director can accept financial assurance until other arrangements can be made. Refer to *Guideline F-15: Financial Assurance Guideline* [PIBS 0226].

### Design Reports for Municipal or Private Sewage Works

You should submit a design report summarizing the design criteria and presenting the design calculations you used in sizing individual components of the works, along with final plans and specifications.

Where a preliminary report has not been, or is not being, submitted for the project, or where some parts of the information in the earlier submitted preliminary report are no longer valid or applicable, the design brief should include the information outlined under the heading: Preliminary Engineering Report, as well as the applicable information outlined below.

**TIP:** (See Part E, section Approvals in Principle Subject to Final Plans and Specifications (Sewage Works) for instances where a preliminary report might be used.)

If a preliminary engineering report has been submitted for the proposed sewage works, the design brief for that particular type of sewage works should include the following information.

### Design Report for Sanitary Sewers

1. Population served (current and anticipated) and per hectare population densities.
2. Area served (current and anticipated) in hectares.
3. Per capita sewage flows.
4. Infiltration allowances expressed in cubic metres per day per hectare.
5. Industrial and commercial flows.
6. Design flow rates, that is, peak sewage flow, including infiltration and industrial and commercial flows for local, interceptor and trunk sewers.
7. Capacity of the existing downstream sewers, pumping stations and treatment plant to receive the anticipated flow from the proposed sewers.
8. Design data and calculations for individual sewers, including the required capacity, sewer slope, roughness coefficient, pipe capacity, flow velocity when full, depth of flow and actual flow velocity at peak design flow if depth of flow is less than 0.3 of the pipe diameter.
9. Minimum separation distance from watermain.

### Design Report for Storm Sewers

1. Identification of sub-drainage areas and their runoff coefficients.
2. Anticipated rainfall frequency and intensity.
3. Generated flows and capacity of sewers selected.
4. Capacity of the receiving watercourse or existing storm sewers to accept the anticipated design flows.
5. Design data and calculations for individual sewers, including the required capacity, sewer slope, roughness coefficient, pipe capacity, flow velocity when full, depth of flow, and actual flow velocity at peak design flow if depth of flow is less than 0.3 of the pipe diameter.
6. Minimum separation distance from watermain.

### Design Report for Sewage Pumping Stations

1. Location of the proposed pumping station and identification of the intended receiver of the discharge (sewer, another pumping station or sewage treatment plant).
2. Population and area (hectares) serviced (current and anticipated).
3. Per capita sewage flows.
4. Design flow rates, that is, peak sewage flow including infiltration and industrial and commercial flows, for initial and anticipated conditions.

5. Type of pumping station and facilities provided.
6. Length, size and type of material of the pumping station's forcemain, flow velocity in the forcemain under initial and anticipated flow conditions, together with calculations of the total dynamic head requirements of the pumps, and evaluation of transient pressure conditions.
7. Number and type of sewage pumps and their individual and combined capacities (capacity ranges for variable speed pumps) at the design dynamic pumping head (pump and system curves should be provided) and the type, power and speed (or speed range) of pump motors.
8. Details on sizing and installation of the standby power generator (where required).
9. Details of pump control and alarm system and any screening, grit removal or comminution facilities.
10. Number and storage capacity of wet well compartments and the station's time to overflow under minimum and peak flow conditions.
11. Wet well operating level and its relationship to inlet sewer minimum flow velocity when inlet sewer is submerged.
12. Wet well emergency overflow elevation in relation to basement elevations in the area upstream of the pumping station.
13. Capacity of the station's emergency overflow and/or bypass facilities and the name of the receiver of emergency overflows, as well as a description of the overflow discharge route.
14. Documented evidence of the capacity of the downstream sewage works' (receiving sewers, pumping station and/or sewage treatment plant) ability to handle the sewage flow from the proposed pumping station, and if there are any existing overflows within the downstream sewage works, you must show that the addition of flows from the proposed pumping station will not result in any increase in frequency or volume of currently occurring overflows.
15. Description of the flow monitoring and recording equipment and other equipment proposed to be provided, for example, heating and ventilation, sump pumps.

### Design Report for Stormwater Management

1. Identification of the drainage area and the receiving water body.
2. Summary of the design criteria (for example, major and minor flows, site-specific target flow rates, land use restrictions, that is, maximum percentage of

imperviousness, minimum watercourse buffer strips, required level of treatment, etc.) and identification of the design criteria sources (that is, master drainage plan, watershed plan and/or subwatershed plan) or names of the authorities (municipality, conservation authority, Ministry of Natural Resources, Ministry of the Environment) that established or approved the design criteria.

3. Summary of information about anticipated storms and flows generated for pre-development, uncontrolled post-development, controlled post-development conditions with hydrographs, including the methodology used for calculations (computer models, rational method, runoff coefficients, etc.).
4. Information about hydraulic capacity of the receiving watercourse, swale, natural channel or existing storm sewers to accept the anticipated flows, including water balance calculations for determining the receiving stream baseflow.
5. Identification of the type of the proposed stormwater detention facility, for example, rooftop, parking lot, underground storage (oversized sewer, detention tank), detention pond (wet and/or dry) or infiltration pond.
6. Identification of the type of the proposed stormwater quality control facilities, for example, on-lot source control, infiltration (that is, perforated pipes, trenches, swales, basins, etc.), stormwater ponds (that is, wet, extended wet, extended dry), wetlands, disinfection facilities.
7. Description and design details (including calculations) of the stormwater management works, including minor and major stormwater conveyance systems and stormwater quantity and quality control facilities, together with the discharge control and emergency overflow features, and any temporary and permanent erosion and sediment control facilities.
8. Description of hydraulic routing of the anticipated and major (that is, 100-year or Regional) storms through the works, including hydrographs.
9. Detailed description of the proposed operation and maintenance procedures for the works, including an agreement between the local municipality and the applicant outlining a maintenance program that contains the name of the operating authority or the person responsible for the maintenance and operation.

## Design Report for Sewage Treatment and Disposal Works

1. Basic data on the volume and composition of the sewage anticipated from the population and area to be served including:
  - design period;
  - anticipated service population and area (hectares), and population density;
  - estimated quantities and characteristics of the domestic sewage, industrial sewage (including identification of all major industrial categories and sewage characteristics, especially those contaminants that may affect the sewage treatment process), septage, landfill leachate, inflow and infiltration and stormwater (combined sewer systems); and
  - total anticipated sewage flow (minimum, average, peak) and waste concentration and loadings.
2. Summary of the proposed effluent quantity and quality criteria, that is, effluent discharge/application regimen, contaminant concentrations and loadings, objectives and compliance criteria, including identification of the receiver.
3. Description (types, number and sizes) of all treatment units and equipment, and effluent disposal facilities; and identification of their process-design parameters (that is, velocities and surface settling rates in grit removal units; surface settling, solids loading, weir overflow rates, and depths and detention times in clarifiers; volumetric and organic loading in septic tanks; anticipated biochemical oxygen demand and suspended solids removals in septic tanks and primary and final clarifiers; organic loading to aeration tanks, lagoons, biological contactors, etc.; aeration rates of aeration systems; capacity of phosphorus removal chemical application system; filtration and backwash rates of effluent filters; capacity of chlorination facilities and detention time provided by chlorine contact tank; irradiation capacity of UV disinfection system; outfall diffuser exit velocities at initial and ultimate sewage flow; effluent application rates and schedules for spray irrigation, rapid infiltration, and subsurface disposal system; sludge (primary, chemical and waste activated) volumetric production rates; volatile solids loading rate, detention time, capacity of heat exchangers and mixers, and gas storage capacity in primary anaerobic digesters; sludge retention time and aeration system capacity in aerobic digesters; volume and available storage (months) in sludge holding tanks; capacity of sludge thickening and dewatering equipment and its efficiency; capacity of sludge incineration facilities; etc.).
4. Detailed process design (or sizing) calculations for all treatment units and equipment and effluent disposal facilities.
5. Analysis of the process impact of recycling of plant secondary streams, such as sludge thickener and digester supernatant, heat treatment decant liquor, sludge dewatering centrate, etc.
6. Hydraulic calculations for all process streams within the sewage treatment plant, influent works and the plant outfall sewer and diffuser, and other effluent disposal facilities (spray irrigation, rapid infiltration, subsurface disposal) under minimum and maximum flow rates.
7. Description of the proposed flow metering, sampling, and monitoring equipment, procedures and schedules, including monitoring of any plant or unit bypasses.
8. Description of the existing facilities (for expansion or upgrading projects at existing sewage works), including pertinent process and hydraulic design data, and discussion of their adequacy in terms of the new design criteria (existing facilities may need to be de-rated or upgraded).
9. Identification of all air pollution (including odour and noise) sources (for example, open tankage, boiler stacks, internal combustion engines, incinerators, air blowers) together with the distances from the points of emission to the property lines and the nearest private residence.
10. Description of the steps you propose to undertake during expansion and upgrading projects at existing treatment facilities, to ensure uninterrupted and adequate treatment of all incoming sewage throughout the construction process.
11. Where the proposed works incorporate processes that are innovative or in an experimental stage, or that include equipment and materials where the available data from full-scale operation is limited or unreliable, you must also provide the following information:
  - all available data pertaining to the proposed process, equipment or material;
  - results of any testing programs that have been undertaken by independent testing agencies, research foundations, universities, etc.;
  - identification of any known full-scale applications of the proposed process/equipment/material, including a description of the type of application and the name and

address of the person who could be contacted for technical information about it;

- discussion of the impact of a potential failure of the proposed process/equipment/material; identification of the measures you propose to undertake to preclude any health or environmental hazard or approval non-compliance as a result of such a failure; proposed contingencies to modify or replace the proposed process/equipment/material in case of their failure; and liabilities associated with the proposal;
- description of the monitoring, testing and reporting program you propose undertake during the experimental period; and
- the proposed duration of the experiment.

### Preliminary Engineering Report

If you are submitting a preliminary engineering report for a proposed sewage works it should present the following information, where applicable:

1. Description of the proposal and where applicable, a description of the associated existing sewage works.
2. Discussion of the assimilative capacity of the receiver (for example, lake, river, groundwater aquifer, soil, vegetation) and the proposed effluent quantity and quality criteria, in other words, effluent discharge/application regimen, and contaminant concentrations and loadings supported by appropriate receiver impact analysis studies or, where applicable, a reference to the environmental study report, if you addressed all these issues in that document.
3. Extent, nature and anticipated population and population densities of the area to be serviced, facilities proposed to serve the area, and provisions for future expansion of the system to include additional service areas and/or population growth or, where applicable, a reference to the environmental study report if you addressed all these issues in that document.
4. Itemization and discussion of present and future average and peak domestic, commercial, institutional and industrial sewage, and extraneous flows to the proposed works, or where applicable, a reference to the environmental study report, if you addressed all these issues in that document.
5. Discussion of raw sewage characteristics and possible effect of any toxic substances that may be present or added (for example, shock loading of hauled septage proposed to be accepted at the plant) and require special treatment. Wherever possible, the variation in sewage strength

should be substantiated by data from sampling surveys or treatability studies.

6. Discussion of adequacy of the proposed sewage treatment and effluent disposal facilities for the anticipated raw sewage quantity and characteristics in terms of the developed effluent quantity and quality criteria. This discussion should include a summary of basic process design parameters of all major components of the treatment and disposal facilities, including operational reliability of key process units, unit redundancy, and backup reliability. Note that you must support your discussion of adequacy of the effluent disposal facilities by appropriate studies, for example, effluent dispersion calculations for outfall diffusers; site topography; vegetative cover and soil assessment for spray irrigation systems; chemical and hydraulic assessment of the unsaturated soil strata of the site for exfiltration and rapid infiltration lagoons; and assessment of the site topography and the chemical and hydraulic characteristics of the unsaturated soil strata for absorption beds (leaching beds and similar subsurface disposal methods).
7. Discussion of the proposed sludge management, including sludge treatment, storage and utilization or disposal program. If you are proposing off-site sludge utilization or disposal you must provide evidence that such utilization/disposal is available.
8. Discussion of the proposed flow metering, sampling and monitoring program, including monitoring of bypasses and overflows.
9. Brief discussion of the location of all significant sewage works structures with respect to the land use in surrounding areas, especially in consideration of noise and odour generation potential and susceptibility to flooding.
10. Discussion of any wet weather bypass and overflow conditions you anticipate (that is, the possibility, frequency, volumes, quality and impact on the receiving water) and approaches you would use to avoid or minimize bypassing and overflows.
11. Assessment of the need to provide standby power facilities for the works (sewage treatment plants and pumping stations) in accordance with *Design Guidelines for Sewage Works* [PIBS 6879].
12. Discussion of the design criteria used for the proposed storm and sanitary sewers, including design flows. For combined sewers, in addition to the sewer design criteria



and explanation of the method used to estimate the combined sewage flow, the information should include an analysis of the impact of the proposed sewers on the operation of the downstream combined sewer overflows (CSOs). Note that the ministry will not allow any new combined sewer systems or new CSOs within the existing systems, nor will increased volume of overflows at the existing CSOs be allowed. As well, the ministry discourages any extension of the existing combined sewer systems and, wherever feasible, you must provide separate stormwater collection and disposal systems for the extension areas (you must provide justification where you cannot achieve this).

13. Description of proposed pumping stations, including location of the pumping station and forcemain (including point of discharge), number and capacities of duty and standby pumps, and provision of station bypass and emergency overflow facilities (including identification of the proposed receiver for the station's emergency overflow), as well as an assessment of the capacity of the downstream sewers, pumping stations, and treatment plant to handle the pumped flows. Note that all sanitary and new combined sewage pumping stations must be designed to handle all incoming flows because the emergency overflow facilities are intended to handle true emergencies only, that is, those resulting from a system failure or upset.
14. Description of any proposed stormwater management and/or treatment facilities, including analysis of stormwater flows, methods for stormwater source controls, retarding runoff, routing, and regulating flows through and in the collection system; retention and detention of stormwater; proposed methods of treatment; and a description of water quantity and quality targets as documented in the official watershed and/or subwatershed plans. Note that where watershed and/or subwatershed plans have not been developed for the area you should use other guidelines and/or plans, for example, Ministry of Natural Resources Fishery Plans or *Guidelines on Erosion and Sediment Control for Urban Construction Sites* 1987, or the Ministry of the Environment's *Interim Stormwater Quality Control Guidelines for New Development*, 1991. In such cases you should contact the appropriate local municipality or conservation authority to establish the need for any stormwater management and you should contact the technical support section of the ministry's appropriate regional office to establish the need for any stormwater

quality control. You must refer to the recommendations of these authorities in your ECA Application information.

15. Discussion of the planning for any future extensions and/or improvements to the sewage works.
16. Preliminary design plan(s), all bearing the project title, name of the municipality, name of the development or facility with which the project is associated, name of the design engineer, and preparation date. Where applicable, your plan(s) should show the plan scale, geographic north, land surveying data, and any municipal boundaries within the area shown, providing the following information (where pertinent):
  - general layout of existing and proposed storm and sanitary sewers (including drainage areas), and location of all major components of other existing and proposed sewage works, including all effluent discharge and sewage overflow points;
  - all existing and future water works that could be affected by the proposed sewage works (for example, wells, water intakes, watermains);
  - existing and future development in the vicinity of the works (except for sewers);
  - general layout (line diagram) of the works (except for sewers);
  - process flow diagrams for all treatment processes that show all process components, the direction of flow of all processed sewage, recycle and waste streams, the location of all chemical addition points, the maximum and average flow rate of all streams entering and leaving each component of the process, and a mass balance for all design parameters around each process component.

### Environmental Impact Analysis

In the Director's assessment of any proposed sewage works, the most important aspect of the environmental impact is the anticipated impact of the works' final effluent on the receiver (that is, surface water body, land area, soil and/or groundwater) and its potential users.

It is your responsibility to assess the assimilative capacity and to determine the actual and potential uses of the intended receiver of the effluent from the proposed works. From your analysis you must determine the effluent quality and discharge regimen criteria for the proposed works. You should determine the effluent criteria in consultation with staff of the technical support section of the appropriate regional office of the ministry

because that office's agreement (in writing) with the criteria is a prerequisite for the Director's issuing of an ECA.

All proposed undertakings that may result in any change in the quality and/or quantity of effluent from existing sewage works must be assessed in terms of the receiver's assimilative capacity and uses. In the case of an existing sewage treatment plant where the receiver assimilative capacity has been previously established, any proposed works that may affect the performance of the treatment plant must be assessed in terms of the previously established effluent compliance criteria and the approved rated capacity of the treatment plant. Expansions of existing sewage treatment and disposal works would usually require re-assessment of the receiver's assimilative capacity and development of new effluent criteria. The need for such a re-assessment of the assimilative capacity of the receiver should be established by the applicant in pre-application consultation with the district and regional staff of the ministry.

The assessment of the assimilative capacity of the receiver must be done at the beginning of the planning and design process as part of the problem identification phase of the project. The effluent requirements based on the assessment should serve as one of the criteria for comparison of alternative solutions to the identified problem. Established effluent quality and quantity criteria are especially essential in the development of design alternatives for the contemplated sewage treatment and/or disposal works. If the eventually established sewage works are to meet the established effluent criteria on a consistent basis, the criteria must be available before the commencement of design and must form the basis of design.

- **Surface Water Impact** – for new or expanded sewage treatment works and for water works sewage disposal, you must assess the assimilative capacity and existing and potential downstream use of the receiver. You must discuss the requirements for the assimilative capacity study with the ministry regional technical support section.
- **Groundwater Impact Assessment** – you must undertake a groundwater impact analysis for works with sewage effluent disposal on land and into the ground (spray irrigation systems, exfiltration/infiltration lagoons, leaching beds and deep injection wells) that may have any impact on the groundwater. You must determine the requirements for the assimilative capacity study of groundwater through discussions with the technical support section of the ministry's appropriate regional office.

## Final Plans

All final plans submitted in support of applications for approval of sewage works must bear, at a minimum, the project title, name of the municipality, name of the development or facility with which the project is associated, and name of the design engineer, including a signed and dated imprint of his/her registration seal. Where applicable, the plans must include the plan scale, geographic north, land surveying data and any municipal boundaries within the area shown.

Detailed engineering plans should include plan views, elevations, sections and supplementary views which, together with the specifications and general layout plans, would provide the working information for finalizing of the construction contract for the works. These drawings should show dimensions and relative elevations of structures, the location and outline of equipment, location and size of piping, ground elevations and liquid/water levels at the minimum and maximum flow conditions.

## Final Plans – Sanitary Sewers

1. **General Plan** – for projects involving new sewage collection systems or substantial additions to existing systems you should include a comprehensive general plan of the existing and proposed sewage works. This plan should show:
  - all major topographic features including existing and proposed streets, contour lines at suitable intervals, drainage areas, watercourses, municipal boundaries, land surveying data used (or assumed bench mark), etc.;
  - location and size of existing and proposed sewers;
  - location and nature of all existing and proposed sewage works associated with the proposed sewers, including any existing sewer overflows; and
  - for the purposes of stormwater management, show all the catchment areas that drain into any proposed or existing stormwater management units, all areas that drain into neighbouring properties without treatment or quality control, the 100-year flood line, existing and proposed building facilities, water well location, stormwater and other utility pipes, swales and municipal drains on roadways. The ultimate receiver should be shown or indicated including its size, area and depth.
2. **Engineering Drawings and Specifications** – you should provide detailed plan and profile drawings for the proposed and adjacent existing sewers. The profiles should have



a horizontal scale of not more than 1:1000 and a vertical scale of not more than 1:100. The plan view should be drawn to a corresponding horizontal scale. Detailed engineering drawings should show:

- location of streets and sewers;
- existing and proposed ground surface, shape, size, slope, material and class of pipe, pumping stations, manholes, overflows and other appurtenances;
- location of all known existing structures that might interfere with, or be affected by, the proposed sewers, especially any watermains and other water works;
- details of sewer bedding and anchoring, manholes and manhole connections, service connections, bridge crossings, stream crossings, support structures for existing structures in the path of construction, trench bracing, etc., and for sewage forcemains, thrust blocks, air and vacuum release valves, connection to the terminal manhole, surge suppressor, special connections, etc.; and
- any additional descriptive specifications and information not included in a separate specifications document that would be necessary to inform the contractor of all project requirements regarding the type and quality of construction materials and prefabricated components, quality of workmanship, testing of structures and materials to meet design standards, and operating tests for the completed works and component units (for example, pressure testing of sewers and forcemains).

### Final Plans – Major Sewage Works

For projects involving municipal or private sewage treatment, disposal facilities, stormwater management facilities or pumping stations, the final plans you include with your ECA Application should include the following:

1. **General Plan** – you should include a comprehensive general plan of the existing and proposed sewage works for any project involving new major sewage works. This plan should show:
  - location of the proposed works and the area to be serviced by the works;
  - all major topographic features including drainage areas; existing and proposed streets, watercourses, contour lines at suitable intervals, municipal boundaries, land surveying data used (or assumed bench mark), etc.;
  - location and nature of all proposed sewage works and existing sewage works associated with the proposed works,

including: pumping stations, treatment plant, effluent discharge points, together with their individual geo-reference coordinates (UTM Easting and Northing), and identification of the main point of reference whose geo-reference coordinates you provided in Section 1 of the ECA Application Form; and

- For the purposes of stormwater management, show all the catchment areas that drain into any proposed or existing stormwater management units, all areas that drain into neighbouring properties without treatment or quality control, the 100-year flood line, existing and proposed building facilities, water well location, stormwater and other utility pipes, swales and municipal drains on roadways. The ultimate receiver should be shown or indicated including its size, area and depth.
2. **Site Plans** – you must provide individual site plans for all proposed major sewage works and modifications/upgrades of such facilities. Each site plan should show:
    - the entire property where the facility is to be (or is) located, including the property lines and identification of the nature of the adjoining lands;
    - topographic features of the property and adjoining lands, including: existing and proposed streets, contour lines at suitable intervals, drainage areas, watercourses, the elevation of the highest known flood level, municipal boundaries and the land surveying data (or assumed benchmark) used;
    - layout, size and nature of the existing, proposed and future structures on the property showing distances from property lines, private residences and other structures on adjoining properties; and
    - test borings and groundwater elevations within site limits.
  3. **General Layout and Detailed Engineering Drawings** – you should provide the following general and detailed engineering layout drawings for all proposed new major sewage works and modifications/upgrades of existing major sewage works:
    - process flow diagrams showing all process components (including: type, size, pertinent features and rated capacity of process units and major equipment, that is, tanks, reactors, pumps, chemical feeders, blowers, etc.); direction of flow of all process, recycle and waste streams (including bypass and overflow lines); the location of all points of chemical addition and treated sewage sampling and monitoring; an indication of the minimum, maximum and

- average flow rates of all streams entering and leaving each process component; and a mass balance for all design parameters around each process component;
- accurate hydraulic profiles through treatment plants, pumping stations, etc., prepared for minimum and maximum flow conditions to a vertical scale adequate to clearly show the elevations of tank tops, channel and trough inverts, weirs and other features directly affecting the hydraulic gradient (for pumping stations, minimum, maximum and overflow liquid levels in the wet well should be shown);
- general layout plans for all major facilities of the works (for example, layout of all aeration tanks together) including all associated process flow channels and piping (showing direction of flow), process and ancillary equipment, air and chemical feed lines, points of chemical addition, etc.;
- construction scale plan and profile drawings (with dimensions and elevations) of all facilities proposed to be constructed or modified, including any additional descriptive specifications and information not included in a separate specifications document;
- process and instrumentation diagrams showing the inter-connection and operation control arrangements for all process and ancillary equipment and appurtenances.

### Sewage Works – Specifications

Regardless of the type of sewage works, you must provide detailed technical specifications for all sewage works projects. The specifications should include all other information that a third-party contractor would be required to know to conform to the project's requirements and/or as stipulated under a current ECA.

In the case of minor works, such as minor storm or sanitary sewer extensions, you can generally note these specifications on the final plans. For more extensive works you will generally have to provide separate specifications documents.

The specifications should include all construction and installation information not shown on the drawings, such as:

1. Type and quality of construction materials and prefabricated components.
2. Quality of workmanship.
3. Type, size, rating, operating characteristics and quality of mechanical and electrical equipment and installations (for example, process and ancillary equipment and appurtenances, valves, piping and pipe joints, electrical apparatus, wiring, metering and monitoring equipment, laboratory fixtures and equipment, special tools).
4. Type and quality of process materials (for example, filter media) and chemicals.
5. Testing of structures, materials and equipment necessary to meet design standards.
6. Operating tests for the completed works and component units (for example, pressure testing of sewers, forcemains and other piping).
7. Maintenance of operation of existing works within the requirements of current ECA during the construction of new works (unless otherwise approved by the ministry).

### Detailed Description of Proposed Works

It is the ministry's current practice to describe approved projects (also referred to as *works*) in the ECA in sufficient detail so that someone can locate and identify the works in the field without the use of engineering drawings. Having this type of detailed description of the ECA application facilitates and expedites the ministry's preparation of the ECA.

**TIP:** The Detailed Description of Proposed Works is different than the Detailed Project and Process Description. The latter includes the larger area and business of the applicant. The former is focussed on a better qualitative description of the location and identification of the exact works.

Therefore, in addition to the project description executive summary you must provide on the Summary Section of the ECA Application Form itself, the ministry recommends you also include a detailed technical description of the proposal clearly identifying all components of the proposed works.

With the exception of sewers, such a detailed description must specify the locations, names, types, number, sizes and capacities of all vital structures and pieces of equipment in the proposed works, and must identify the role of the individual components in the process flow. You should describe the individual components of the works in separate paragraphs in the order of their appearance in the process flow.

For storm sewers and sanitary sewers the description should take the form of a table that shows the street on which the works are to be located and their location on that street with respect to the nearest intersecting streets. Separate tables should be prepared for storm sewers and sanitary sewers.

In the following pages are some examples of detailed descriptions of various types of sewage works.

### Example of Detailed Description – *Subdivision A Expansion Storm and Sanitary Sewer*

Street	From	To
<b>Sanitary sewers</b>		
Tap Court	Cul-de-sac	Bing Avenue
<b>Storm sewers</b>		
Moore Crescent	Approx. 25 m south of Roseland Drive (east intersection)	Roseland Drive (west intersection)

### Example of Detailed Description – Sewage Pumping Station

A 3.0 m diameter precast concrete wet well sanitary sewage pumping station, located on the south side of Maple Street approximately 55 m west of Oak Street, equipped with two (2) submersible pumps, each rated at 10.3 L/s at a TDH of 10.4 m, connected to the below described 100 mm diameter sanitary forcemain on Maple Street.

### Example of Detailed Description – Sanitary Forcemain

A 100 mm diameter sanitary forcemain from Maple Street P.S. to the sanitary sewer on Oak Street, as follows:

Street	From	To
Maple Street	Approx. 55 m west of Oak Street (Maple Street P.S.)	Oak Street
Oak Street	Maple Street	Approx. 120 m north of Maple Street (sanitary sewer discharge)

### Example of Detailed Description – Stormwater Management Facilities

- A 2.2 hectare rooftop providing a detention volume of approximately 896 m<sup>3</sup>, with 35 rooftop drains restricting the peak release rate during the 1:100 year design storm to 20 L/s each, discharging into the site storm sewer system draining into the pond described below;
- A 1.3 hectare parking lot providing a total detention volume of 759 m<sup>3</sup> at a maximum ponding depth of 0.22 m, with five (5) catchbasins equipped with orifice control devices restricting the peak discharge rate during the 1:100 year design storm to 215 L/s each, discharging into the site storm sewer system draining into the pond described below;
- A 0.15 hectare extended detention pond receiving stormwater runoff from a total drainage area of 9.8 ha (including the above-described rooftop and parking lot), having a total storage volume of 1650 m<sup>3</sup> at a maximum pond elevation of 93.4 m, a 450 mm diameter inflow pipe and headwall, and an outlet well with an overflow inlet weir restricting the maximum discharge rate during the 1:100 year design storm to 240 L/s, discharging into a 300 mm diameter 120 m long outlet sewer to the municipal drain.

## Example of Detailed Description – Sewage Treatment Plant

### Plant Building

A building housing the below-described sewage treatment facilities and the associated office, staff, and laboratory facilities, including two (2) independent negative pressure ventilation systems for the high and low odour process areas, one equipped with a bio-filter and the other with an activated carbon filter installed on the respective system's discharge to the atmosphere for the purpose of odour control.

### Influent Works

- A plant influent channel system consisting of a 600 mm wide 850 mm deep plant inlet channel splitting into two (2) screen inlet channels, each 300 mm wide and 1000 mm deep;
- two (2) 350 mm wide and 850 mm deep screen channels, each equipped with a mechanically raked bar screen with 15 mm openings rated at 4450 m<sup>3</sup>/d;
- two (2) circular vortex grit removal units installed downstream of the bar screens, each having a diameter of 2.0 m and a side water depth of 3.1 m, each rated at a peak flow of 4450 m<sup>3</sup>/d, and each with an air lift grit removal system, a 300 mm diameter inlet and a 600 mm diameter outlet port, discharging into individual outlet channels leading to the secondary treatment facilities' inlet channel;
- one (1) screw conveyor grit classifier serving both vortex grit removal units, with drain connections to both screen outlet channels;
- two (2) flow metering Parshall flumes in the two vortex grit removal units' outlet channels, including ultrasonic level indicators and transmitters.

### Secondary Treatment Facilities

Two (2) parallel continuous inflow sequential batch reactors (SBR), operated on a time cycle basis adjustable in the time range of 4 to 2.4 hours and set up in such a way that at no time effluent is discharged from the two reactors simultaneously, each reactor consisting of a tank 26.0 m long x 7.3 m wide x 4.0 m maximum side water depth, operated in the depth range of 2.9 m to 4.0 m, and each equipped with the following facilities:

- a system of inflow distribution piping connected to the SBR influent splitter box designed to distribute the influent sewage evenly throughout the bottom of the reactor,
- a system of fine bubble diffusers with associated distribution piping designed to provide aeration for biological oxidation and mixing, connected to the compressed air supply system described below,
- one (1) submersible centrifugal waste activated sludge pump rated at 150 L/min at a TDH of 6.1 m, with a discharge line to the waste activated sludge holding tank described below, and
- one (1) motorized effluent decanter rated at 57.9 L/s, equipped with a pivoting float scum guard, and discharging into a channel feeding the UV disinfection channel described below;

Three (3) (two duty, one standby) positive displacement air blowers serving as the compressed air supply for the SBR aeration system, each rated at 9.3 m<sup>3</sup>/min standard air (329 SCFM) at a discharge pressure of 44.8 kPa, and each equipped with an inlet air filter, inlet and outlet silencers, flexible connectors, pressure relief valve, discharge check valve and isolation valves.

### Phosphorus Removal Chemical Application Facilities

One (1) 18,000 L capacity alum solution storage tank, together with two (2) (one duty, one standby) diaphragm type chemical metering pumps rated at 30 to 300 L/hr, with an alum solution feed line to the SBR influent splitter box.

### Effluent Disinfection Facilities

A 9.5 m long x 610 mm wide x 1220 mm deep UV disinfection channel, equipped with a 5810 mm long fixed serpentine weir on the outlet to the plant effluent outfall sewer, designed to maintain the liquid level in the channel at a depth of 624 mm, and a low pressure mercury vapour ultraviolet irradiation lamp system having 65% of the radiation output at the wave length of 253.7 nm, providing a UV irradiation density of 3.35 watts per litre at the design instantaneous peak effluent flow rate of 61.0 L/s, consisting of 128 UV lamps in sixteen (16) independently removable lamp modules arranged in two (2) banks in series.

### Plant Effluent Outfall Sewer

A 500 mm diameter plant effluent outfall sewer extending from the Plant Building into the St. Lawrence River approximately 200 m offshore, equipped with three (3) 100 mm diameter diffuser ports installed on the end section of the outfall sewer.

### Sludge Digestion and Storage Facilities

- One (1) 45 m<sup>3</sup> capacity waste activated sludge holding tank, equipped with one (1) progressive cavity type thickener feed pump, capable of pumping sludge at a rate of 100 to 500 L/min at a discharge head of 3.0 m and a suction lift of 3.5 m;
- One (1) 1 m wide gravity belt thickener capable of thickening waste activated sludge at a sludge feed rate of 200 to 500 L/min, including a liquid polymer feed system;
- One (1) 10 m<sup>3</sup> capacity thickened sludge holding tank;
- One (1) two-stage autothermal thermophilic aerobic digestion (ATAD) system located outside of the Plant Building, consisting of:
  - two (2) insulated 2.9 m diameter and 3.0 m high batch feed and discharge sludge digestion reactors, each reactor equipped with one (1) adjustable nozzle induced suction jet type air injector installed on the digester feed/recirculation pipe, one (1) propeller type foam cutter, all associated sludge feed and removal piping and appurtenances, and a reactor venting system, including a foam trap, discharging to the air intake pipe of the SBR aeration blowers described above,
  - four (4) (two duty, two standby) screw type centrifugal sludge pumps, each rated at 20.0 L/s at a TDH of 7.0 m, together with an integrated system of piping and appurtenances for transfer of sludge from the thickened sludge holding tank to the digestion reactors, between the reactors and from the reactors to the digested sludge storage tanks, and
  - a standby heat supplementing system serving the ATAD system, consisting of a tube heat exchanger installed on the ATAD system's sludge recirculation piping, supplied with hot water at 93°C from four (4) hot water boilers serving also the plant's heating system;
- one (1) two-chamber 712 m<sup>3</sup> capacity digested sludge storage tank, equipped with a progressive cavity type sludge recirculation and tanker truck transfer pump, rated at 1000 L/min at a discharge head of 7.0 m and a suction lift of 2.5 m, together with the associated sludge suction, recirculation and transfer piping.

### Emergency Power Supply System

A diesel engine standby power generator rated at more than 700 kW, together with two (2) 200 L capacity fuel tanks.

## Example of Detailed Description – Sewage Lagoon and Effluent Spray Irrigation

- A sewage stabilization and storage lagoon system consisting of two (2) cells operated in series, as follows:
  - a clay lined settling cell (Cell “A”), receiving sewage via an existing forcemain in Side Road 20, having a total area of 1.6 ha, a total depth of 3.1 m (including a 0.3 m sludge storage bottom zone and a 0.66 m freeboard), and an effective storage capacity of 21,600 m<sup>3</sup>, including a forcemain inlet structure with a 200 mm diameter valved connection (valve normally open) to the forcemain in Side Road 20, a 250 mm diameter valved cell outlet pipe to the storage cell (Cell “B”), and a 300 mm diameter cell overflow pipe to Cell “B” with a rip-rap berm protection at both (Cell “A” and Cell “B”) ends of the pipe;
  - a clay lined storage cell (Cell “B”), receiving settled sewage from the above-described Cell “A”, having a total area of 6.2 ha, a total depth of 3.1 m (including a 0.3 m sludge storage bottom zone and a 0.66 m freeboard), and an effective storage capacity of 109,925 m<sup>3</sup>, including a forcemain inlet structure with a 200 mm diameter valved connection (valve normally closed) to the forcemain in Side Road 20, and a 1.5 m deep reinforced concrete lagoon effluent intake sump in the bottom of the cell, having walls extending 0.3 m above the bottom of the cell with stop log guides for extension of the walls up to 0.6 m above the bottom of the cell;
- A lagoon effluent pumping station consisting of a 3.0 x 3.6 m wood frame building located adjacent to the lagoon, housing one (1) 75 hp electric motor driven centrifugal sewage pump rated at 132 L/s at a TDH of 38.0 m with a 250 mm diameter suction pipe to the above-described lagoon effluent intake sump in Cell “B” with a self-cleaning rotating intake strainer, and a 300 mm diameter discharge pipe to the below-described South Field effluent distribution system, equipped with a magnetic flowmeter;
- A 23.0 ha effluent spray irrigation field (South Field), located immediately to the north and east of the above-described sewage lagoon, consisting of four (4) spray irrigation sites equipped with independently operated systems of sprinkler heads serviced by dedicated systems of distribution mains and laterals with valved connections to the above-described pumping station’s discharge pipe, with the individual spray irrigation sites sized as follows:

Site A1: 65,293 m<sup>2</sup>

Site C2: 36,506 m<sup>2</sup>

Site B2: 26,855 m<sup>2</sup>

Site C3: 11,382 m<sup>2</sup>

- An 18.6 ha effluent spray irrigation field (North Field), located northwest of the above-described South Field, consisting of three (3) spray irrigation sites equipped with independently operated systems of sprinkler heads serviced by dedicated systems of distribution mains and laterals with valved connections to an approximately 630 m long 250 mm diameter transmission forcemain from the above-described pumping station’s discharge pipe at the north end of the South Field, with the individual spray irrigation sites sized as follows:

Site B1: 37,643 m<sup>2</sup>

Site C1: 65,564 m<sup>2</sup>

Site D1: 16,312 m<sup>2</sup>



### Example of Detailed Description of Septic Tank and Subsurface Disposal System

- A 500 L capacity prefabricated concrete box grease trap overflowing to the septic tank described below;
- A 20,000 L capacity prefabricated concrete two-cell septic tank, equipped with a 3 mm slot 250 mm diameter tube screen on inlet to the tank overflow pipe discharging to the pump chamber described below;
- A 5,000 L capacity prefabricated concrete pump chamber equipped with a 1.0 hp submersible sewage pump, together with pump control and alarm level switches, and an above-ground control panel, feeding the leaching bed distribution system; and
- A 750 m<sup>2</sup> leaching bed, together with a pressure-tight distribution box and 300 m of 32 mm diameter perforated distribution pipe arranged in ten (10) 30 m long parallel runs independently connected to the distribution box, spaced at centre line distance of 2.0 m and placed in 0.8 m deep x 0.6 m wide gravel trenches.

### Additional Guidance Relating to the Design of Sewage Works

The following publications prepared by the ministry, or with the participation of the ministry, provide useful information relating to the design of sewage works:

- Design Guidelines for Sewage Works [PIBS 6879]
- Procedure F-5-5: Determination of Treatment Requirements for Municipal and Private Combined and Partially Separated Sewer Systems [PIBS 1584]
- Stormwater Management Planning and Design Manual [PIBS 4329]
- Procedure F-6-1: Procedures to Govern Separation of Sewers and Watermains [PIBS 0629]

Recommended Standards for Wastewater Facilities, 2004, GLUMRB<sup>3</sup>

Note: You should not confuse the above publications with regulations or standards that you must adhere to in order to qualify for an ECA. It is not the ministry's intention to stifle innovation and if your design engineer can demonstrate that all environmental and public health protection requirements can be satisfied on a consistent basis by the proposed works, the ministry will consider the proposal for approval.

### Form Section 6.5: Supporting Documentation and Technical Requirements – Waste Disposal Sites

If your project involves handling, treatment, processing, disposal, storage or transferring of waste and is subject to approval requirements for a Waste Disposal Site under EPA section 27, to review the impacts associated with collecting and managing waste on a site, the ministry requires various studies and reports.

Note that for each type of Waste Disposal Site there are minimum requirements regarding the type of information that you must include with your application. For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

In addition to the minimum requirements, depending on site-specific or project-specific characteristics, the Director may require additional information from you. The chart below summarizes the types of reports required concerning different Waste Disposal Sites.

It should be noted that the content of the report will vary depending on the type of Waste Disposal Site that the report relates to.

<sup>3</sup> The ministry is a member of the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers (GLUMRB), and participates in the development of, and ascribes to, the GLUMRB's recommendations for sewage and water works standards known as the *Ten States Standards*.

## Waste Disposal Site Application Information Requirements

In the sections following table 11 you can find specific information about the content requirements for the different required forms for each type of Waste Disposal Site.

Table 11

Waste Disposal Site	Design and Operations Report	Stormwater Management Report (if site includes outside storage of waste)	Hydro-geological Report or Assessment or Physical and Water Use Conditions	Waste Analysis Plan	Odour Impact Assessment	Odour Management and Control Plan
Landfill Site	✓		✓		An Odour Impact Assessment and Odour Management and Control Plan should be considered for any Waste Disposal Site. If you decide odour is not an issue and you believe an assessment and plan are not necessary, please describe on your application the reasoning for the decision.	
Thermal Treatment Site	✓					
Waste Transfer Stations	✓	✓				
Waste Processing Site	✓	✓		✓		
Composting Site	✓	✓	✓ (if site is outdoors on a natural base including concrete or asphalt pad)		✓	✓

- If your project involves the destruction of PCB waste you should contact the ministry for the appropriate form.

### Landfill Sites

The ministry's regulation for landfill sites (Ontario Regulation 232/98) applies to new and expanded landfill sites that receive municipal waste and that have a final capacity greater than 40,000 cubic metres. This regulation also imposes specific requirements and standards on the design and operation of the site, as well as requirements for financial assurance. When applying for an ECA you must show that you have met the requirements of Ontario Regulation 232/98. For additional guidance on this regulation and approval guidelines, refer to: *Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites* [PIBS 7792].

**TIP:** Though this guideline pertains specifically to municipal waste landfills with a final capacity greater than 40,000 cubic metres, it is also a useful reference for designing landfill sites that are not explicitly covered by Ontario Regulation 232/98.

Under Ontario Regulation 347 R.R.O 1990 and Ontario Regulation 232/98, landfill sites with a final capacity of greater than 1.5 million cubic metres are required to collect, capture and flare landfill (there are some exemptions for sites that do not generate landfill gas of significant quantity.) For additional guidance on these regulatory requirements and how they relate to approval guidelines for a landfill gas collection and control

system, refer to: *Landfill Gas Capture: A Guideline on the Regulatory and Approval Requirements for Landfill Gas Capture Facilities* [PIBS 6876].

Ontario Regulation 347 R.R.O 1990 section 5.2 prescribes approval requirements for service area changes to landfill sites.

In addition to the specific information related to landfill sites that you provide on Section 5.4.4 of the ECA Application Form, for a landfill site you must include the following technical documents:

- Design and Operations Report for Landfill Sites
- Hydrogeological Assessment Report for Landfill Sites

### Design and Operations Report for Landfill Sites

A design and operations report for landfill sites describes the site design and development, environmental control measures, daily operations and maintenance, contingency measures, site closure, and post-closure monitoring and maintenance. If you operate a landfill site your design and operations report must be current at all times. If you submit an application to amend an ECA you must include an updated version reflecting changes to the operations report. At a minimum, design and operations reports for landfill sites must include:

1. Site Plan/Location Map showing:
  - topography;
  - total area of the site and zoning of the site;
  - land use, official plan designation and zoning of the surrounding area including:
    - the nearest residence,
    - the proximity of residential areas,
    - the nearest well,
    - the nearest occupied industrial or commercial building;
  - location and dimensions of all buildings, bermed areas, on-site roads, access routes, unloading areas, loading areas and tanks, site fencing, paved areas, pollution control devices, property lines, etc.
2. Detail of the site preparations for:
  - landfilling;
  - daily operation;
  - environmental control measures;
  - site development and closure; and
  - post-closure monitoring and maintenance.
3. Designed capacity of the proposed landfill area.
4. Waste types, quantities, characteristics and origin of the incoming material.
5. The maximum quantity of each type of waste to be received on an annual and daily basis.
6. Emergency operation and contingency plans including, at a minimum:
  - the preparation for, prevention of, response to and recovery from an environmental emergency such as spills, potential fire, explosions, flooding and other possible emergencies;
  - requirements for staff training related to emergency procedures;
  - emergency equipment requirements and availability;
  - company and ministry notification procedures in case of emergency.
7. Procedures for:
  - record-keeping, including waste classifications and the rates and volumes of waste landfilled at the site;
  - reporting to the ministry, including any monitoring results, spills, volumes and types of wastes received and landfilled;
  - vehicle routes within the site;
  - monitoring program and procedures;
  - how the design and operations report will be maintained to ensure it is current at all times;
  - suitable document control procedures and records that indicate appropriate document approval and that track all changes that have been made to the previously approved versions.
8. Details about the security, hours of operation, days of operation and the number of days to be open per year.
9. Details about facility maintenance and inspection, staff training and the qualifications of senior staff supervising operations at the site.
10. Assess noise impacts and mitigation (facility and truck traffic), including anticipated truck traffic volume.
11. Monitoring and control programs for, at a minimum:
  - noise;
  - odour;
  - litter;
  - dust;
  - vector and vermin.
12. Decommissioning plan for eventual closure, addressing procedures related to equipment and buildings, dismantling and demolition, site restoration and final residue disposal.

## Hydrogeological Assessment Report for Landfill Sites

The Hydrogeological Assessment Report for landfill sites describes the existing hydrogeological conditions and assesses potential impacts on ground and surface water from the proposed waste disposal activities. At a minimum, the Hydrogeological Assessment Report for landfill sites must include:

1. a description of site topography and drainage,
2. soil characteristics and site stratigraphy,
3. groundwater conditions and flow; and
4. an assessment of the potential impacts of leachate from the waste on the groundwater and surface water on areas of potential impact.

## Thermal Treatment Facilities

Thermal treatment facilities include incineration, gasification, pyrolysis and plasma arc treatment. The approval requirements for thermal treatment facilities depend on the type and amount of waste to be thermally treated, and other specific requirements described in Ontario Regulation 347 R.R.O. 1990. For information on incinerator design and operation, see:

- Guideline A-1: Combustion, Air Pollution Control and Monitoring Requirements for Biomedical Waste Incinerators in Ontario [PIBS 1310];
- Guideline A-7: Air Pollution Control, Design and Operation Guidelines for Municipal Waste Thermal Treatment Facilities [PIBS 7883]

In addition to requirements related to waste management sites, when seeking an ECA for a thermal treatment facility you should keep in mind that there could also be issues that fall under the EPA section 9 related to air and noise emissions.

Incinerators associated with veterinary hospitals and with crematoria are exempt from EPA Part V by Ontario Regulation 347 R.R.O. 1990 section 5. (Note that the exemption only applies with regard to veterinary hospitals burning their own waste.)

Waste that meets the ministry's waste derived fuel criteria, as established in Ontario Regulation 347 R.R.O. 1990 is considered to be waste derived fuels (WDF). Ontario Regulation 347 R.R.O. 1990, section 28 sets out the criteria for exemption from the approvals process for WDF sites. Note that the ministry does not consider waste that does not meet the ministry's waste derived fuel criteria to be liquid industrial or hazardous waste in situations where you intend to use it as a fuel.

Ontario Regulation 347 R.R.O. 1990, subsection 28(1) exempts on-site thermal treatment equipment from the requirements of EPA section 27 as long as you do not incinerate any hazardous waste or liquid industrial waste at the thermal treatment facility. If you operate a hazardous or liquid industrial waste facility, however, you do need an ECA.

Thermal treatment equipment treating wood waste, as defined in Ontario Regulation 347 R.R.O. 1990, is exempt from the requirements of EPA Part V under certain conditions. Ontario Regulation 347 R.R.O. 1990 subsection 28.1(1) and 28.1(2) describe the requirements for thermal treatment of wood waste and list the exempting criteria.

Refer to Ontario Regulation 101/07 to determine how the requirements of the EAA may apply to the proposed thermal treatment facility.

In addition to the specific information related to thermal treatment facilities that you provide on Section 5.4.3 of the ECA Application Form, you must also include the following:

- Design and Operations Report for Thermal Treatment Facility

## Design and Operations Report for Thermal Treatment Facilities

This report describes the site design, environmental control measures, monitoring, daily operations and maintenance, contingency measures, and site closure and includes an assessment of all aspects of the thermal treatment facility and its potential for environmental impacts. If your proposed thermal treatment facility is exempt from the requirements of EPA section 9 (which relates to air and noise), you must include detailed plans and specifications regarding the combustion equipment with the application. If you operate a thermal treatment facility your design and operations report must be current at all times and if you submit an application to amend an ECA you must include an updated version of the report if the report changes as a result of the application. At a minimum, design and operations report for thermal treatment facilities must include:

1. Site Plan/Location Map that shows:
  - topography;
  - total area of the site and zoning of the site;
  - land use, official plan designation and zoning of the surrounding area including:
    - the nearest residence,

- the proximity of residential areas,
  - the nearest well,
  - the nearest occupied industrial or commercial building;
  - Location and dimensions of all buildings, waste storage areas, bermed areas, on-site roads, access routes, unloading areas, loading areas and tanks, site fencing, paved areas, thermal treatment unit(s), pollution control devices, property lines, etc.
2. A description of the waste types, quantities, characteristics and origin of the incoming material.
  3. The maximum quantity of each type of waste to be thermally treated on an annual and daily basis.
  4. A detailed description of the thermal treatment process to be used, including a description of the equipment and technology to be used.
  5. Details of the thermal treatment unit design, including:
    - the design capacity of the proposed facility;
    - technical specification of the thermal treatment equipment and description of the end use of the heat produced, that is: steam boiler, air heater, etc.;
    - the proposed maximum:
      - continuous waste material firing rate,
      - frequency, if intermittent,
      - clean fuel firing rate, if co-fired with waste material,
      - chemical analysis of a representative sample, including, at a minimum, the parameters listed in the ministry's waste derived fuel criteria (Ontario Regulation 347 R.R.O. 1990);
    - Emission controls, including:
      - pollution control equipment,
      - expected emissions,
      - impact modeling and compliance with Ontario Regulation 419/05 standards,
      - emergency stack operations.
  6. Details of all residual waste generated at the proposed facility, including
    - quantity of each waste stream;
    - type and classification of each residual waste stream;
    - waste unloading, handling and feed system;
    - waste storage provisions;
    - handling and disposal procedures.
  7. Emergency operation and contingency plans including, at a minimum:
    - the preparation for, prevention of, response to, and recovery from, an environmental emergency such as spills, potential fire, explosions, power outages, flooding and other possible emergencies;
    - requirements for staff training related to emergency procedures;
    - emergency equipment requirements and availability;
    - company and ministry notification procedures.
  8. Procedures for:
    - recordkeeping, including waste classifications and the rates and volumes of waste treated;
    - reporting to the ministry, including any monitoring results, spills, volumes and types of wastes received and treated;
    - labelling of storage containers, areas and vehicle routes within the site;
    - monitoring programs and procedures;
    - site and waste handling, including:
      - how waste is transported/managed on the site, stored, or otherwise managed on-site and during shipment off-site,
      - on-site storage method, capacity and processing details,
      - a process schematic and a material balance,
      - types and quantities of process residues.
  9. Details about the site fencing, security, hours of operation, days of operation and the number of days to be open per year.
  10. Details about facility maintenance and inspection, staff training and the qualifications of senior staff supervising operations on site.
  11. Assessment of noise impacts and mitigation (facility and truck traffic), including the anticipated truck traffic volume.
  12. Monitoring and control programs for, at a minimum:
    - noise;
    - odour;
    - litter;
    - dust.
  13. Decommissioning plan for eventual closure, addressing procedures for equipment/buildings, dismantling and demolition, site restoration and final residue disposal.



## Waste Transfer Stations

A waste transfer station is defined as a Waste Disposal Site used for the purpose of transferring waste from one vehicle to another for transportation to another Waste Disposal Site. At a waste transfer station, only waste of the same type may be bulked/consolidated.

**TIP:** If the proposed facility includes any processing activity then you must refer to the application requirements for a waste processing site described in Part C, “Form Section 6.5: Supporting Documentation and Technical Requirements – Waste Disposal Sites” of this guide.

Under Ontario Regulation 101/07 of the EAA, you must comply with an environmental screening process if more than 1,000 tonnes of residual waste per day (on an annual average) is transferred from a proposed waste transfer station for final disposal. For more information, see the regulation and *Guide to Environmental Assessment Requirements for Waste Management Projects* [PIBS 6168].

In addition to the specific information related to waste transfer stations that you provide on Section 5.4.2 of the ECA Application Form, you must include the following:

- Design and Operations Report for Waste Transfer Stations
- Stormwater Management Report for Waste Transfer Stations

### Design and Operations Report for Waste Transfer Stations

A design and operations report for waste transfer stations describes the site design, environmental control measures, monitoring, daily operations and maintenance, contingency measures, and site closure and includes an assessment of all aspects of the facility and its potential for environmental impacts. If you operate a waste transfer station site your design and operations report must be current at all times and if you submit an application to amend an ECA you must include an updated version of the report if the report changes as a result of the application. At a minimum, a design and operations report for waste transfer stations must include:

1. Site Plan/Location Map that shows:
  - topography;
  - total area of the site and site zoning;
  - land use, official plan designation and zoning of the surrounding area including:
    - the nearest residence,
    - the proximity of residential areas,
    - the nearest well,
    - the nearest occupied industrial or commercial building;
- location and dimensions of all buildings, waste storage areas, bermed areas, on-site roads, access routes, unloading areas, loading areas and tanks, site fencing, paved areas, pollution control devices, property lines, etc.
2. Details of the site fencing, security, hours of operation, days of operation and the number of days to be open per year.
3. Details of facility maintenance and inspection, staff training and the qualifications of senior staff supervising operations on site.
4. A description of the type and origin of the waste to be accepted and, for subject waste (defined in Ontario Regulation 347 R.R.O. 1990) the description must include the waste class(es) and characteristic(s). Subject wastes will require registration in accordance with Ontario Regulation 347 R.R.O. 1990.
5. A schematic diagram showing the flow of waste through the site.
6. A description of the waste screening procedures, including waste inspection and analytical testing.
7. The maximum amount of waste that will be received at, and transferred from, the site on a daily and annual basis.
8. The maximum amount of waste to be stored on-site at any one time, the maximum storage duration, a description of the method of storage and the design of the storage facility.
9. A detailed calculation justifying the maximum on-site storage.
10. A list of sites where you will dispose of waste, including confirmation that the receiving site is approved to accept the waste.
11. Assessment of noise impacts and mitigation (facility and truck traffic), including the anticipated truck traffic volume.
12. Monitoring and control programs for, at a minimum:
  - noise;
  - odour;
  - litter;
  - dust.
13. Decommissioning plan for eventual closure, addressing procedures related to equipment/buildings, dismantling and demolition, site restoration and final residue disposal.
14. Emergency operation and contingency plans including, at a minimum:



- the preparation for, prevention of, response to, and recovery from an environmental emergency such as spills, potential fire, explosions, power outages, flooding and other possible emergencies;
- requirements for staff training related to emergency procedures;
- equipment requirements and availability;
- company and ministry notification procedures.

15. Procedures for:

- recordkeeping, including waste classifications and the rates and volumes of waste managed at the site;
- how waste is transported/managed onto the site, stored, or otherwise managed on-site and during shipment off-site;
- reporting to the ministry, including any monitoring results, spills, volumes and types of wastes received and processed;
- labelling of storage containers, areas and vehicle routes within the site;
- monitoring programs and procedures;
- suitable document control and records that indicate appropriate document approval and that track all changes that have been made to the previously approved versions.

If the waste transfer station will receive and store liquid industrial waste or hazardous waste you must include the following additional requirements in your design and operations report:

16. Details of the design of the drums, storage tanks and other storage areas including:
  - specific tank locations;
  - identification of tanks for each ministry-prescribed waste class number and description.
17. Storage tank specifications including:
  - tank dimensions;
  - maximum volume;
  - volume monitoring device;
  - venting;
  - type and gauge of material;
  - type of assembly;
  - tank foundation;
  - piping and coating to prevent chemical leakage and corrosion.
18. Detailed identification of the waste segregation program on the site plan, including:

- A description of the waste segregation program and explanation of how the storage tanks and storage areas are situated to prevent incompatible waste from coming in contact through a spill or other means.

19. Details of piping layout and pump locations.

20. A calculation showing that the design and capacity of the berms required around the tanks, the containment area surface design, and the drainage sump capacity are consistent with the ministry's document: *Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities* [PIBS 5113].

- The details of the berms and base of the storage area must be provided, including dimensions, material and permeability, taking into consideration the nature of the waste material.
- A written statement from a professional engineer indicating the storage facility complies with the above guideline. Any variation from the guideline must be specified and justified by the engineer.

### Stormwater Management Report for Waste Transfer Stations

A stormwater management report for waste transfer stations is required for waste transfer stations that include provisions for the outside storage of waste or discharge from inside the building to outside. This information will be used to assess potential impacts offsite, for example, on the nearest waterbody. At a minimum, this must include a detailed plan of storm water management, including:

- a description of the nature of the interaction of the waste with rainwater, which should include considerations of volumes of storm water runoff and storage;
- surface elevations indicating the direction of drainage and a description of all discharge locations;
- impact prevention and monitoring plans, which should include a discussion of management of rainwater contaminated with liquid industrial or hazardous wastes; and
- an assessment of the need for approval as an activity under OWRA section 53, or reference to an existing approval or application for approval for such an activity.

As well, you must include with your ECA Application for a waste transfer station written approval from the local municipality for any discharges to the sanitary sewer and you must indicate the predicted effluent quantity and quality for this discharge.

## Waste Processing Sites

A waste processing site is a site that manages or prepares waste for subsequent reuse or disposal. Waste processing sites include any Waste Disposal Sites (other than final disposal sites) where the waste received is altered so that it no longer exists in the form in which it was received.

Under Ontario Regulation 101/07 made under the EAA you must comply with an environmental screening process if more than 1,000 tonnes of residual waste per day (on an annual average) is transferred from a proposed waste processing site for final disposal. For more information, see the regulation and *Guide to Environmental Assessment Requirements for Waste Management Projects* [PIBS 6168].

In addition to the specific information related to waste processing sites that you provide on Section 5.4.2 of the ECA Application Form, you must include the following:

- Design and Operations Report for Waste Processing Sites
- Drainage Report for Waste Processing Sites
- Waste Analysis Plan for Waste Processing Sites for subject waste only

### Design and Operations Report for Waste Processing Sites

A design and operations report for waste processing sites describes the site design, environmental control measures, monitoring, daily operations and maintenance, contingency measures, and site closure and includes an assessment of all aspects of the facility and its potential for environmental impacts. If you operate a waste processing site your design and operations report must be current at all times and if you submit an application to amend an ECA you must include changes to the operations report. At a minimum, the report must include all of the information (items 1-15 on pages 75 and 76) required to be included in a design and operations report for a waste transfer station, as well as the following additional information:

1. A detailed description of the processes, equipment and technology to be used.
2. A list of processing parameters to be monitored and the monitoring procedures.
3. Record keeping details, including waste classifications, rates and amounts of waste processed, including any reagents used in the process.

4. A schematic diagram showing the flow of waste through the site, including waste receiving, storage, and processing areas and showing a mass balance.
5. The maximum quantity of each type of waste to be processed annually, including calculations to support the design capacity of the proposed facility.
6. A description of the types and quantities of any waste that will be generated and/or materials that will be recovered at the site, and a description of how you will manage, store and disposed of it.
7. Details of inspection and testing requirements for outgoing wastes.
8. Details of any requirements and procedures that are mandatory under the land disposal restrictions in Ontario Regulation 347 R.R.O. 1990.
9. A decommissioning plan for eventual closure, addressing procedures for equipment/buildings, dismantling and demolition, site restoration, and final residue disposal.

If your site will receive and store liquid industrial waste or hazardous waste you must include the following additional information in your design and operations report for waste processing sites:

1. Details of the design of the drums, storage tanks and other storage areas including:
  - specific tank locations;
  - identification of tanks for each ministry-prescribed waste class number and description.
2. Storage tank specifications including:
  - tank dimensions;
  - maximum volume;
  - volume monitoring device;
  - venting;
  - type and gauge of material;
  - type of assembly;
  - tank foundation;
  - piping and coating to prevent chemical leakage and corrosion.
3. Detailed identification of the waste segregation program on the site plan, including:
  - A description of the waste segregation program and explanation of how the storage tanks and storage areas are situated to prevent incompatible waste from coming in contact through a spill or other means.

4. Details of piping layout and pump locations.
5. A calculation showing that the design and capacity of the berms required around the tanks, the containment area surface design, and the drainage sump capacity are consistent with: *Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities* [PIBS 5113]. As well, the details of the berms and base of the storage area must be provided, including dimensions, material and permeability, taking into consideration the nature of the waste material.
6. A written statement from a professional engineer indicating the storage facility complies with the above guideline. Any variation from the guideline must be specified and justified by the engineer.

### Stormwater Management Report for Waste Processing Sites

A stormwater management report is required for waste processing sites that include provisions for outside storage of waste. The information that must be included is the same as what must be included in a stormwater management report for a waste transfer station.

**TIP:** (see Part C, Form Section 6.4: Supporting Documentation and Technical Requirements – Sewage.)

### Waste Analysis Plan for Waste Processing Sites

A waste analysis plan for waste processing sites is required for all waste processing sites that are subject to land disposal restrictions under Ontario Regulation 347 R.R.O. 1990. A waste analysis plan documents chemical and physical testing of representative samples requiring treatment in accordance with Ontario Regulation 347 R.R.O. 1990 subsection 75 to 79, 82 and 83.

## Composting Sites

Composting is the treatment of organic waste by aerobic decomposition of organic matter by bacterial action for the production of stabilized humus (Reg. 347 R.R.O. 1990).

The guidance described here applies only to centralized composting facilities processing non-hazardous organic materials for the purpose of producing compost. It does not address:

- some composting operations (such as backyard composters and on-farm composting of agricultural wastes);

- management of excess soil from construction activities;
- composting of “regulated dead animals” under the Food Safety and Quality Act, and the Nutrient Management Act;
- processes that are not aerobic (such as anaerobic digestion and fermentation);
- biological treatment of hazardous wastes; and
- processes to produce products that are not intended for use as a soil conditioner (such as the production of animal feed).

You must include with your ECA Application for a composting site confirmation from the local municipality that the proposed composting facility meets all zoning by-laws.

You should ensure that you carried out the public notice/consultation in accordance with the requirements of the EBR and include the entire area surrounding the composting facility that has the potential to be adversely affected by odours from the facility.

Centralized composting sites receive organic waste, for example, leaf, yard and food waste, from various sources (residential and business, etc.). Composting facilities are considered waste processing sites but given the potential for odour impacts that may be produced at these sites, the ministry has separated them into their own category.

Sites which generate and compost their own waste within their own boundaries do not require Part V, EPA approval.

Central composting requires an ECA under EPA subsection 27 unless exempted by regulation. Ontario Regulation 101/94 exempts sites for composting leaf and yard waste under prescribed conditions. Also, the compost generated at these sites is exempt from the requirements of EPA Part V if it complies with the applicable criteria in Ontario Regulation 101/94. For more information on municipal leaf and yard waste composting requirements see Ontario Regulation 101/94.

Central composting sites that are not required to obtain an ECA under section 9 of the EPA or section 53 of the OWRA will likely be required to submit documentation normally required by these approvals as part of their waste processing site ECA.

For additional information refer to Guideline for the Production of Compost in Ontario [PIBS 8413] [www.ene.gov.on.ca/environment/en/category/organics/index.htm](http://www.ene.gov.on.ca/environment/en/category/organics/index.htm).

Under Ontario Regulation 101/07 of the EAA you must comply with an environmental screening process if more than 1,000 tonnes of residual waste per day (on an annual average) is transferred from a composting site to a location for final disposal.

For composting sites you must include the following:

- Design and Operations Report for Composting Sites
- Drainage Report for Composting Sites
- Hydrogeological Assessment Report for Composting Sites
- Odour Impact Assessment for Composting Sites
- Odour Management and Control Plan for Composting Sites

### Design and Operations Report for Composting Sites

This report describes the site design, environmental control measures, monitoring, daily operations and maintenance, contingency measures, and site closure plan. It includes an assessment on all aspects of the facility and its potential for environmental impacts. If you operate a composting site your design and operations report must be current at all times. If you submit an application to amend an ECA you must include an updated version of the operations report to reflect any changes as a result of the application. At a minimum, the design and operations report for composting sites must include the following:

1. Site Plan/Location Map that shows:
  - topography;
  - total area of the site location and zoning;
  - land use, official plan designation and zoning of the surrounding area including:
    - the nearest residence,
    - the proximity of residential areas,
    - the nearest well,
    - the nearest occupied industrial or commercial building;
  - location and dimensions of all buildings, bermed areas, on-site roads, access routes, unloading areas, loading areas, pre-processing areas, processing areas and waste storage areas, site fencing, paved areas, pollution control devices, property lines, etc.
2. Details regarding site fencing, security, hours of operation, days of operation and the number of days to be open per year.
3. Designed capacity of proposed facility.
4. Waste types, quantities, characteristics and origin of the incoming material.
5. The maximum quantity of each type of waste to be processed annually.
6. A detailed description of the process, equipment, facilities and technology to be used, including (as applicable):
  - waste pre-processing;
  - waste composting and mixing, including a description of the recipe, how the material will be blended, the resulting range of C:N ratio and bulk density of the mix and methods of aeration and irrigation;
  - the curing process for unfinished compost (including the location and duration);
  - proposed monitoring arrangements;
  - process quality sampling and testing;
  - exhaust handling and control systems
  - leachate management.
7. The maximum amount of waste to be stored on-site at any one time, the maximum storage duration and a description of the method and the design of the storage facility.
8. Emergency operation and contingency plans including, at a minimum:
  - the preparation for, prevention of, response to, and recovery from, an environmental emergency such as spills, potential fire, explosions, power outages, flooding, and other possible emergencies, including the release of foul odours to the environment and air exhaust control equipment malfunctions;
  - requirements for staff training related to emergency procedures;
  - equipment requirements and availability;
  - company and ministry notification procedures.
9. Procedures for:
  - waste acceptance;
  - tracking wastes that will result in the production of different categories of compost;
  - cross-contamination prevention;
  - recordkeeping, including waste classifications and the rates and volumes of waste processed;
  - final end use of the product and quality assurance (for example, meeting compost quality standards)
  - responding to complaints;
  - reporting to the ministry, including any monitoring results, spills, volumes and types of wastes received and processed;
  - labelling of storage containers and areas;
  - monitoring programs and procedures;
  - how the design and operations report will be maintained to ensure it is current at all times;

- suitable document control and records that indicate appropriate document approval and that tracks all changes that have been made to the previously approved versions.
- 10. Details about facility maintenance and inspection and the qualifications of senior staff supervising operations on site, and an assessment of noise impacts and from (facility and truck traffic).
- 11. Monitoring and control programs for, at a minimum:
  - noise;
  - odour;
  - litter;
  - vectors;
  - vermin;
  - dust.
- 12. Contingency plans to handle operational upsets such as; for material management: if the final product does not meet the intended quality standards or process objectives.
- 13. Decommissioning plan for eventual closure, addressing procedures for equipment/buildings, dismantling and demolition, site restoration and final residue disposal.

### Stormwater Management Report for Composting Sites

The stormwater management report is required for composting sites that include provisions for the outside storage of waste. This information will be used to assess potential impacts offsite, for example, on the nearest waterbody.

At a minimum this must include a detailed plan of storm water management including:

- a description of surface water hydrology (for example, existing topography, natural versus artificial surfaces, drainage patterns, proximity to surface waters, extent of local floodplains, local precipitation patterns);
- a description of the nature of the interaction of the waste or compost with rainwater. This should include calculations of volumes of storm water runoff based on an appropriate rainfall intensity curve and volume of available stormwater;
- surface elevations indicating the direction of drainage and a description of all discharge locations;
- impact prevention and monitoring plans, which should include a discussion of management of rainwater that comes into contact with waste or compost; and
- an assessment of the need for approval as an activity under OWRA section 53, or reference to an existing

approval or application for approval for such an activity (See additional detail in this guide on stormwater management in Section 4.6).

Composting facilities should be designed and operated with the objective of minimizing the production of leachate and preventing its release to the environment. Leachate production can be controlled by reducing contact between precipitation and feedstock or compost. Stormwater that does not come into contact with waste, compost or leachate should be separately controlled.

### Hydrogeological Assessment Report for Composting Sites

This report is required if the composting operation is to occur outdoors on a natural base. Locating a composting facility on a concrete or asphalt pad does not preclude groundwater contamination due to the potential cracking of the pads. This report must describe the existing hydrogeological conditions and must include information about the estimated impact on surface and groundwater from the proposed operations. At a minimum, the Hydrogeological Assessment Report for composting sites must include:

1. Local geology, including soil composition and stratigraphy.
2. Local hydrogeology, such as the depth to the water table, current groundwater quality and direction of groundwater flow.
3. Identification of wells, water takings and other water uses.
4. An assessment of potential impacts on groundwater and surface water at the property boundaries.
5. Monitoring and contingency plans, where deemed appropriate, to detect and if necessary, mitigate impacts.

### Odour Impact Assessment (OIA) for Composting Sites

An odour impact assessment (OIA) for composting sites is an assessment of the anticipated effects of odours generated at the facility. An odour impact assessment should be carried out using an approved air dispersion model (for example, AERMOD) to assess impacts from all odour sources (including fugitive sources) under various weather scenarios using the most representative meteorological data. The assessment should identify those conditions that are most likely to result in an adverse odour impact. Predicted odour levels should be assessed at the property boundary, the nearest receptors and at the most impacted sensitive receptor. The purpose of an OIA is to estimate the emission of odours from the site and assess whether the proposed facility siting and design can adequately



control odours or assess whether future odour controls requiring approval under section 9 of the EPA are required to avoid adverse affects.

### Odour Management and Control Plan for Composting Sites

An odour management and control plan for composting sites should provide a detailed description of the following:

1. Procedures and best management practices to be followed at the facility to alleviate odour impacts during normal operations.
2. Procedures for operation of the composting site under less than optimal conditions (for example, frozen feedstock, prolonged rain events or receipt of feedstock in an anaerobic state). The plan should also discuss specific weather conditions under which odour generating activities, such as windrow turning, should not be undertaken.
3. The odour management and control plan should also identify the anticipated problems that might occur and should include detailed contingency procedures for actions to take when an odour problem occurs.

### Guidance Related to Biomedical Waste

The term *biomedical waste* is defined in *Guideline C-4: The Management of Biomedical Waste in Ontario* [PIBS 7397]. Your application must show compliance with this guideline. The guideline provides information for effective management of biomedical waste through appropriate packaging, segregation, treatment, storage and disposal methods. The guideline identifies acceptable technologies for various types of biomedical waste (for example, anatomical and cytotoxic waste must be incinerated).

Biomedical waste can be disposed of through incineration or by non-incineration. For information about incineration of such waste, refer to: *Guideline A-1: Combustion, Air Pollution Control and Monitoring Requirements for Biomedical Waste Incinerators in Ontario* [PIBS 1310]. For information about non-incineration of such waste, refer to: *Guideline C-17: Non-Incineration Technologies for Treatment of Biomedical Waste (Procedures for Microbiological Testing)* [PIBS 4321].

Biomedical waste that has been successfully treated by a technology acceptable to the ministry is considered *treated biomedical waste* and may be disposed of directly in a municipal landfill.

### Guidance Related to Waste Containing PCBs

The information here deals with waste containing monochlorinated or polychlorinated biphenyl (PCB) at a concentration greater than 50 mg/kg. Every site containing PCB waste and PCB-related waste, but not containing other wastes, is classified as a PCB storage site. These sites may operate under Director's instructions under Ontario Regulation 362 R.R.O. 1990 or under an ECA.

The disposal and management options for PCB waste are: storage sites, processing sites, thermal treatment sites or mobile processing. For more information regarding mobile PCB processing or thermal treatment facilities refer to: *Details Document, Mobile PCB Destruction Facilities* (April 1986) [PIBS 1063], Reg. 352 R.R.O. 1990.

### Form Section 6.6: Supporting Documentation and Technical Requirements – Waste Management Systems

With regard to an ECA Application for a Waste Management System, in addition to the specific information related to Waste Management Systems that you provide on Section 5.5 of the ECA Application Form, there are only two cases where you must provide additional technical requirements:

- If you are transporting biomedical waste, or
- If you are transporting PCB waste.

For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

### Transporting Biomedical Waste

You must include the following additional information with your ECA Application for a Waste Management System if you will be transporting biomedical waste:

1. A description of the physical location where you will disinfect and wash the vehicles.
2. A copy of the driver and waste management personnel training manual you use when training drivers and personnel. The manual must confirm that all personnel handling biomedical waste have been trained as required by Ontario Regulation 347 R.R.O. 1990 and trained specifically in the handling and management of biomedical waste. The manual must conform to: *Guideline C-12-1: An*



*Outline of the Essential Components of Training Programs for Drivers of Liquid Industrial and Hazardous Waste Transportation Vehicles [PIBS 7914].*

3. A copy of your operations manual. The manual must include detailed information relating to packaging and biomedical waste handling methods, as well as vehicle disinfection procedures. Specifically, the manual must:
  - identify the types of biomedical waste transported;
  - indicate how the waste is to be packaged;
  - detail your procedures with respect to training drivers;
  - identify the driver's responsibility for waste handling, specifically that the driver knows:
    - emergency handling procedures,
    - safe and secure waste loading procedures,
    - attendance with the waste load at all times is required,
    - decontamination of waste transportation vehicle procedures.
4. A detailed spill contingency and emergency response plan that includes emergency management procedures and a contingency plan for various accident and spill scenarios including notification protocols, spill containment, cleanup and decontamination procedures. The plan must describe all spill containment equipment, that will be used to cleanup and repackage spill, and identify where it will be stored.

## Transporting PCB Waste

You must include the following additional information with your ECA Application for a Waste Management System that includes the transportation of PCB waste:

1. A copy of your operations manual. The operations manual must include detailed information relating to packaging and PCB waste handling methods, as well as vehicle decontamination procedures. Specifically, the manual must:
  - Clearly state the purpose of the intended PCB transport.
  - Identify each type of PCB waste intended for transport, for example: full transformers (and whether they are large or small); empty transformers (and whether they are large or small); liquids; small capacitors; large capacitors; leaking capacitors; hydraulic equipment; etc.
  - For each type of PCB waste specified, the plan should include detailed packaging methods.
  - Specify drivers' responsibilities with respect to handling PCB waste, specifically that drivers know:

- safe handling procedures,
  - that they are required to check the integrity of the vehicle and waste load during transportation (a circle check every 200 km/two hours),
  - safe waste loading procedures,
  - the requirements for secure loading of the waste for transport,
  - safe unloading procedures,
  - that drivers must be in attendance at all times with the waste load and that the vehicle must be locked.
- Identify vehicle decontamination procedures in the event of a spill inside the vehicle.
  - Indicate whether the vehicle is used to transport any other type of waste.
2. A detailed spill contingency and emergency response plan. The plan must include emergency management procedures and contingencies for various accident and spill scenarios. Each of the following must be described in detail:
    - With regard to your spill kit:
      - identify items included for cleaning up and repackaging spills,
      - indicate where the spill kit is kept,
      - indicate how personnel who might have to use the equipment have been trained.
    - List protective equipment/clothing to be used or worn during cleanup.
    - Identify how spill containment will be conducted in relation to the PCB waste type transported (solids/liquids).
    - Identify which parties/agencies are to be notified and the notification order in the event of a spill (for example: head office of company, ministry Spill Action Centre, ministry local district office, etc.;
    - Indicate specifically how spill cleanup is conducted:
      - inside the vehicle,
      - on soil/hard surfaces.
    - Repackaging of spilled and contaminated material:
      - identify the types of containers in which repackaged waste or contaminated material will be collected,
      - indicate how the waste will be disposed after repackaging.
    - Decontamination of equipment used in spill cleanup.

## Form Section 6.7: Supporting Documentation and Technical Requirements – Mobile Waste Processing

For ECA Applications for general waste processing and for contaminated site cleanup waste processing you must include additional technical requirements with your application. For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

Specifically, in addition to the information related to mobile waste processing that you provide on Section 5.6 of the ECA Application Form you must provide:

- Design and Operations Report for Mobile Waste Processing of General Waste
- Design and Operations Report for Mobile Waste Processing of Liquid Waste

### Design and Operations Report for Mobile Waste Processing of General Waste

A design and operations report for mobile waste processing of general waste describes the mobile waste processing equipment, processing technology and the types of waste to be treated. It also describes the operational control measures, monitoring requirements, contingency plans and equipment maintenance requirements. If you carry out mobile waste processing of general waste, your design and operations report must be current at all times and if you submit an application to amend an ECA, you must include an updated version of the report if the report changes as a result of the application. At a minimum, the design and operations report for mobile waste processing of general waste must include the following:

1. The area to be served by the mobile waste processing equipment, expected days and hours of operation and the physical location where the mobile waste processing equipment will be stored when not in use.
2. A description of the types of waste to be processed. For liquid industrial waste and hazardous wastes you must identify each of the waste classes and characteristics. For non-hazardous waste types you must identify the categories of waste to be processed, such as wood waste, used tires, construction and demolition waste (C&D), etc.
3. The number of mobile waste processing units to be operated as part of the Waste Management System.

4. For each mobile waste processing unit you must identify and provide a clear description of the mobile waste processing equipment (including equipment make, model and serial number). If you rent generic equipment for the mobile unit on an as-needed basis you must provide a general description of the equipment (for example, rubber tire backhoe, excavator).
5. For each mobile waste processing unit you must provide a detailed description of the processing method (technology) to be used, including a flowchart illustrating the sequence of steps involved in the process for each type of waste or waste class from the time the waste stream enters the mobile unit to the point at which all processing/treatment operations are complete.
6. The processing capacity of each of the mobile units.
7. Drawings (preferably a plan and elevation drawing) indicating the dimensions, separation distances, location of various equipment and the overall dimensions of each mobile unit.
8. Identification of any additives or reagents used in processing of waste, including the relevant Material Safety Data Sheets.
9. A description of the waste screening program to be used to initially characterize the wastes, if applicable.
10. A list of process parameters to be monitored and monitoring procedures (including the frequency of monitoring), if applicable.
11. A description of all residual waste streams generated by processing equipment including, as applicable, relevant ministry waste classes and amounts. If there are variations between the different mobile processing units, describe each unit separately and clearly identify the differences between the units.
12. Identify how the residual waste and processed waste are to be managed or disposed of. Describe who will be responsible for disposal of the residual waste.
13. Provide a detailed sampling and analysis program, if applicable, for the waste to be processed, the processed waste and any residual waste streams the mobile units generate.
14. Provide site preparation and planning details, as well as procedures to be followed when operations are completed and the mobile unit is moved off-site.
15. Provide details about waste and processed waste stockpiling procedures, if applicable, including the handling procedures, types of liners used, runoff containment system design, runoff handling, etc.

16. Describe the contingency measures for spills, fires and other emergency situations including: the equipment to be used, the procedures to be followed and the chain of responsibility in handling such situations. You should also include procedures for handling of waste generated as a result of emergency situations.
17. Describe site security arrangements, such as fencing, gates, supervision and a description of the signs, including the information to be displayed.
18. A general description of any air/noise emissions resulting from the operation of the mobile unit(s).
19. Proposed procedures for mobile unit equipment cleaning and handling of any waste generated through cleaning.
20. A description of the maintenance requirements for the mobile unit equipment.
21. Staff training requirements.
22. A description of procedures for:
  - recordkeeping, including waste classifications and the rates and volumes of waste that are to be managed at the site;
  - how waste is transported/managed onto the site, as well as how it is stored, or otherwise managed, on-site and during shipment off-site;
  - reporting to the ministry, including any monitoring results, spills, volumes and types of wastes received and processed;
  - labelling of storage containers, areas and vehicle routes within the site;
  - a monitoring and analytical program.

## Design and Operations Report for Mobile Waste Processing of Liquid Waste

A design and operations report for mobile waste processing of liquid waste must include the following additional information if you use the mobile waste processing equipment for processing liquid waste:

1. Specification(s) for all tanks or vessels that are part of the mobile unit including:
  - tank dimensions;
  - maximum volume;
  - volume monitoring devices;
  - venting;
  - type and gauge of material;
  - type of assembly;
  - tank foundation;
  - piping and coating to prevent chemical leakage or corrosion.
2. Details of the containment system for any tanks or vessels that are a part of the mobile unit, including the design of the containment system, its holding capacity, methods of cleanup of any spills contained within, etc.
3. A description of any liquid discharges related to operating the mobile unit and its disposal site destinations.
4. A description of liquid level monitoring procedures.

## Form Section 6.8: Supporting Documentation and Technical Requirements – Cleanup of Contaminated Sites

If your proposal includes activities for the purpose of cleaning a site of existing contaminants you need to include the following information in your application (this type of activity may be either a mobile activity or a site-specific, stationary activity). The following specifies what information is needed in either case.

For more information refer to the checklist for technical requirements for a complete ECA submission at: [www.ene.gov.on.ca/environment/en/resources/index](http://www.ene.gov.on.ca/environment/en/resources/index).

## Detailed Project and Process Description for Cleanup of Contaminated Sites

The detailed project and process description for cleanup of contaminated sites should contain, in addition to what is described in Part C, Detailed Project and Process Description, the following:

1. A detailed description of the sampling and analysis program you will follow, including a list of process monitoring/testing parameters and the frequency of the monitoring you will conduct. The description should include identifying responsibilities related to sampling and testing and should include the following:
  - the initial assessment and characterization of the contaminated media, for example, soil, water, etc.;
  - the monitoring of contaminated media undergoing treatment;
  - the assessment of media that has been processed by the mobile equipment; and
  - the testing requirements for any residual waste streams generated by the process.

2. A description of the range of contaminants and the discharges that result from operating the cleanup equipment. The discharges may include:
  - All residual waste streams generated by way of the processing equipment, including the identification of relevant waste classes, characteristics and amounts.
  - A description of all sewage effluent generated by way of the processing equipment, including the quantity and quality of the effluent.
  - Contaminated material and processed material stockpiling/storage/disposal procedures where *material* is soil, water, residual waste.

## Design Report for Cleanup of Contaminated Sites

A Design Report for Cleanup of Contaminated Sites is required for both site-specific and mobile cleanup activities. This report describes, in detail, the equipment and processes that will be used to treat the contaminants on-site and to manage the discharges and by-products from the cleanup process. It also describes the operational control measures, monitoring requirements, contingency plans and equipment maintenance requirements. At a minimum, the design report must include the following:

1. Site preparation and planning details, as well as procedures followed when operations are completed.
2. Specification of treatment system with the basis of design for all components. In general, this will include:
  - the sizing of the unit, with the design variables used to determine the size;
  - the maximum capacity of the unit or system including the degree of contamination that the unit or system is capable of treating.

The details of your design will be heavily dependent on the type of process you propose. You may be required to also complete the application requirements described in Part C for air emissions, noise and vibration, sewage or waste. Please contact the district office for more information. For example, the following may be required if your proposal is to clean contaminated soil:

- The identification of any additives or reagents you will use in processing waste, including the relevant Material Safety Data Sheets.
- Specification of all tanks or vessels that are part of the mobile unit, if applicable, including:

- tank dimensions,
  - maximum volume,
  - volume monitoring devices,
  - venting,
  - type and gauge of material,
  - type of assembly,
  - tank foundation,
  - piping and coating to prevent chemical leakage or corrosion.
- Details on the waste and processed waste stockpiling procedures, including: handling procedures, types of liners used, runoff containment system design (berms, liners, etc.), proposed handling of collected leachate, etc.
3. Details of the containment system for any tanks or vessels that are a part of the processing unit including, but not be limited to, its holding capacity and methods of cleanup of any spills contained within. Also include a description of the methods used to control and monitor the liquid levels in the tanks. If applicable, the details should show that the design meets: *Guidelines for Environmental Protection Measures at Chemical and Waste Storage Facilities* [PIBS 5113].
  4. For all residual waste streams described in the detailed project and process description, describe how the residual waste will be managed or disposed of and identify who will be responsible for its disposition (that is, the processing unit owner or the property owner/tenant).
  5. For all sewage effluent identified in the detailed project and process description, describe how the effluent will be managed or disposed of and identify who will be responsible for its disposition (that is, processing unit owner or the property owner/tenant).
  6. A description of any by-product generated by way of the activity. Describe the characteristics of the by-product and how it will be managed or disposed of and identify who will be responsible for its disposition (that is, the processing unit owner or the property owner/tenant).
  7. If the project will be removing soil (ex-situ soil cleanup), identify the proposed end use of the soil that has been treated by the processing unit, including the details of the proposed end use criteria if the soil is to be reused at the site.
  8. Description of the preparation for, prevention of, response to and recovery from an environmental emergency such as spills, potential fire and other possible emergencies including:

- the equipment to be used;
  - the procedures to be followed and the chain of responsibility in handling such situations. Procedures for handling of waste generated by the emergency situations should also be included;
  - company and ministry notification procedures in case of emergency;
  - requirements for staff training related to emergency procedures.
9. Description of the site security arrangements, that is, fencing, gates, supervision and description of the signs, including the information to be displayed.
  10. Proposed processing unit equipment decontamination procedures, if applicable
  11. Maintenance requirements for the processing equipment.
  12. Staff training requirements based on the technology being used.
  13. Procedures for:
    - Recordkeeping, including waste classifications and the rates and volumes of waste that are managed at the site.
    - Describing how waste is stored or otherwise managed on-site and during shipment off-site.
    - Reporting to the ministry, including any monitoring results, spills, volumes and types of wastes received and processed.
    - Labelling of storage containers, storage areas and vehicle routes within the site.
  15. The area to be served by the mobile unit, days and hours of operation anticipated, and the physical location of where the mobile unit will be stored when not in use.
  16. The number of mobile waste processing units to be operated.
  17. Proposed mobile unit equipment cleaning procedures and handling of waste generated by the cleaning procedures.

If your proposal is for use or operation of mobile equipment to clean up contaminated sites, also include the following in the design report:

14. Equipment information for each unit in order to clearly identify the equipment, including:
  - the unit type, process description, equipment type, make, model, serial number;
  - where applicable, describe any pipes and their layout, any liners and their use, tanks and their storage capacities, blowers, compressors, pumps, equipment used for pile construction, soil turning, mixing, etc.;
  - if you rent generic equipment for the mobile unit on an as-needed basis you must provide a general description of the equipment (for example, rubber tire backhoe, excavator).



# Additional Information in Support of ECAs with Limited Operational Flexibility

If you have applied for an ECA with Limited Operational Flexibility, in this section you will find details about further technical requirements. These requirements are in addition to the applicable requirements in Part C. In Part D we discuss:

- what Limited Operational Flexibility is
- general requirements applicable when applying for Limited Operational Flexibility
- additional EBR notification with regard to ECAs with Limited Operational Flexibility
- special requirements when applying for an ECA with Limited Operational Flexibility for specific types of projects

An ECA with Limited Operational Flexibility permits you to make some modifications to your facility's operations or works without having to seek an amendment to the ECA. These modifications would be for specific, predefined aspects or within a specific, predefined limit of a key parameter, like an emissions limit. However, only the following projects are eligible for an ECA with Limited Operational Flexibility:

- a project with air emissions (per EPA s. 9),
- a project with noise (per EPA s. 9),
- a project with sewage works (per OWRA s. 53),
- a municipal waste transfer station, or
- a municipal waste transfer and processing facility with processing operations limited to the sorting of incoming waste (excluding hazardous waste) for the purpose of removing recyclable materials from the waste stream.

Besides having to be a project that qualifies for Limited Operational Flexibility, the applicant must first qualify; the Director for the Ministry of the Environment will not issue an ECA with Limited Operational Flexibility if there are any outstanding non-compliance issues or complaints against the applicant or broader public or ministry concerns.

## General Requirements When Applying for Limited Operational Flexibility

When submitting an application for an ECA with Limited Operational Flexibility you must meet the following specific requirements in addition to the other requirements detailed in this guide:

- Your EBR posting with regard to a project requesting Limited Operational Flexibility must specify the flexibility you will be applying for. (For more information, see [Part E, EBR Proposal Abstract for ECAs with Limited Operational Flexibility](#)).

**TIP:** This is the Project description executive summary in Part B, There are templates for projects with Limited Operational Flexibility below.

- You must define the operational envelope for the project.
- For projects that have air or noise requirements, in defining the operational envelope you must include:
  - a description of the unit processes at the facility,
  - the overall facility production limit or capacity, and

- documentation to show compliance with applicable regulations or guidelines for any equipment with specific operational limits.
- For projects that include waste management or sewage works, in defining the operational envelope you must include:
  - an engineer's report prepared and stamped by a qualified professional engineer who is not a direct employee of the applicant.
- If your project includes waste management or sewage works, in addition to the mandatory consultation with the district office you must consult with the local municipality to confirm that your project meets local zoning rules. You must provide evidence of the conformance with the zoning rules.

Please note that final decision regarding eligibility for Limited Operational Flexibility lies with the Director for the Ministry of the Environment and applications may be rejected for several reasons that include but are not limited to: municipal concerns or increased public interest in the application. Applications that are rejected and are deemed ineligible may be assessed as an application for an ECA without Limited Operational Flexibility.

## Detailed Project and Process Description – Implications for Limited Operational Flexibility

All applications for an ECA must have a detailed project and process description

**TIP:** see [Part C, Detailed Project and Process Description](#).

The detailed description must include key information about the operational parameters that define the operating envelope of the activity as well as the main processes that occur at the facility and the main discharges to the natural environment. Any or all of these may inform what modifications may be made under your Limited Operational Flexibility.

You should develop the project description with care, making it explicit enough to describe the operations that are conducted at the facility but with parameters that allow for flexibility.

For example, if you are applying for an ECA with Limited Operational Flexibility for a printing operation (an activity under EPA s. 9) you should list the exact specifications of the printing presses and all other equipment provided in the ESDM report.

With this information, the summary project description that will be posted to the EBR may read:

*A printing process facility that manufactures books and other printed materials, consisting of the following processes and support units:*

- Aluminum Print Plate Developing;
- Paper Printing;
- Coating (book covers);
- Binding (hot melt stations); and
- Packaging, Warehousing, Shipping (raw products and finished products).

*Including the equipment, processes, and any other ancillary and support processes and activities.*

## Examples of Limited Operational Flexibility

Limited Operational Flexibility can be granted with regard to different types of potential modifications. However, the details of the flexibility will depend on your project type. For example, an Industrial Sewage Works project may apply flexibility differently than a waste transfer site because of specific issues with that media or project or because certain project types may not be eligible for certain types of flexibility. The table below shows some examples. In all cases, any modifications under the flexibility would still have to comply with the terms and conditions in the ECA, such as effluent or discharge limits, consistency with the function of the approved proposal or pre-identified modifications in an engineer's report and any other standards or legal requirements. For any modifications outside of the Limited Operational Flexibility, you would need an amendment to your ECA.

The scope of the Limited Operational Flexibility may cover:

- **Modifications to equipment** – this type of Limited Operational Flexibility allows you to modify, add, upgrade or enhance processing operations or equipment, so long as the changes are consistent with the function of the approved operations, or to meet the requirements of the ECA. Such flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.
- **Modifications to operational procedures** – this type of Limited Operational Flexibility allows you to make changes to the operations of the works that are consistent with the function of the approved operations. These modifications will be allowed as long as the operational methodology is not modified.

- **Modifications that are routine** – this type of Limited Operational Flexibility allows you to make changes to activities outlined in your operational envelope, so long as the changes have predictable, environmentally insignificant effects or are considered administrative.
- **Modifications to the infrastructure** – this type of Limited Operational Flexibility allows changes to the structural elements of the site, including buildings, grounds and utilities.
- **Receipt of residential solid municipal waste (emergency situation)** – this would allow a Waste Disposal Site that is normally only allowed to receive and transfer municipal waste that is limited to Industrial, Commercial and Institutional waste to receive domestic

waste in the event a Director declared an emergency situation (such as a border closing or municipal strike).

**TIP:** Note: See [Appendix 1](#) for further explanation of what is and is not afforded Limited Operational Flexibility for Sewage Works. See [Appendix 4](#) for a further examples of what is and is not afforded Limited Operational Flexibility for Waste Disposal Sites.

**Operational procedures and waste projects:** A waste project with Limited Operational Flexibility will allow the ECA holder to increase the amount of waste that is stored on-site within a predetermined envelope. You must define the maximum quantity of waste that can be stored on the Waste Disposal Site and the locations where waste can be stored. This amount will be identified in the ECA. You may choose to operate the

Table 12

Limited Operational Flexibility Modifications	Examples (subject to the conditions of the approved ECA)		
	Air, Noise/Vibration, Odour	Sewage	Waste
<b>Equipment</b>	<ul style="list-style-type: none"> <li>• addition of pollution control equipment</li> <li>• addition of equipment that would not alter the minimum separation distance for noise</li> </ul>	<ul style="list-style-type: none"> <li>• replace/upgrade pumps</li> <li>• add a supervisory control and data acquisition (SCADA) system</li> <li>• improve the disinfection process and use equivalent oil/grit separators</li> </ul>	<ul style="list-style-type: none"> <li>• transform from a manual sorting operation to a fully automated sorting facility</li> </ul>
<b>Operational Procedures</b>	<ul style="list-style-type: none"> <li>• an increase or change in the rate of use or composition of raw materials; debottlenecking</li> <li>• product reformulation or model year updates, such as a paint colour change</li> </ul>	<ul style="list-style-type: none"> <li>• modify the coagulant chemical type and dosage used in a treatment process (as long as there are no new contaminants or by-products that the ECA does not cover)</li> </ul>	<ul style="list-style-type: none"> <li>• amount of waste stored or received at a site up to a predefined maximum quantity (subject to conditions below)</li> </ul>
<b>Routine</b>	<ul style="list-style-type: none"> <li>• repairing of equipment to the same specifications as was in the ECA</li> </ul>	<ul style="list-style-type: none"> <li>• as laid out in the operational envelope in the engineer's report</li> </ul>	<ul style="list-style-type: none"> <li>• relocating the waste storage areas for sorted materials (bailed cardboard, etc.)</li> <li>• moving a fence</li> <li>• adding a new gate</li> <li>• expanding/relocating an existing parking lot</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>• a relocation of an emission point</li> </ul>	<ul style="list-style-type: none"> <li>• generally not allowed</li> </ul>	<ul style="list-style-type: none"> <li>• constructing a larger receiving/processing building</li> </ul>

site with a storage amount below the approved limit, in which case it must identify a series of waste storage levels (steps) that it may operate under. You must also prepare an applicable financial assurance estimate for each level/step. To increase the on-site storage (move up a step) you will be required to notify the ministry in advance and to provide additional financial assurance.

A waste project with Limited Operational Flexibility will allow an ECA holder to utilize an annual averaging of waste that is received. This will enable the Waste Disposal Site to receive more waste per day during peak periods to account for seasonal fluctuations in waste generation. The ECA holder must assess and define the maximum daily amount of waste that the site can manage (process/transfer). This maximum throughput will be identified in the ECA as a threshold daily receiving limit. You must also specify the maximum quantity of waste that is to be received at the site on an annual basis. The maximum quantity is restricted to 365,000 tonnes per year unless you have received prior approval under the EAA for an increased amount. An ECA with Limited Operational Flexibility will allow you to receive the maximum annual amount of waste while not exceeding the daily threshold limit. You will be required to maintain an up-to-date record of the quantities of waste that are both received at the site and shipped from the site, to ensure that the site is being operated in compliance with the annualized waste limit and maximum daily threshold.

## EBR Proposal Abstract for ECAs with Limited Operational Flexibility

If you are applying for Limited Operational Flexibility, there are expanded sample templates for your project description executive summary which serves as the EBR proposal abstract.

**TIP:** See [Part B](#), for discussion of the regular project description executive summary.

In addition to the basic information in the project description you must also clearly define the Limited Operational Flexibility you are requesting.

For examples, see: *Sample Application Package for a Comprehensive Waste Transfer and Processing Facility Certificate of Approval* [PIBS 6837] and *Sample Application*

*Package for an Air & Noise Certificate of Approval* [PIBS 5987] and *Sample Application Package for a Certificate of Approval (Air & Noise) for a Laboratory* [PIBS 7848].

In your project description executive summary you must clearly identify that you are seeking Limited Operational Flexibility. To do this, the ministry suggests clearly stating that the proposal is for an ECA with Limited Operational Flexibility and add any other details you think might be relevant to people reading EBR notices, including information about the operating envelope. For example, you must provide a summary of the main characteristics of the business, such as the type and quantity of waste or the main categories of emission sources (such as manufacturing operations, painting operations, etc.).

**TIP:** See [Appendix 2](#) for sample templates of the EBR proposal abstracts.

The ministry has developed standard templates for section 9 projects and waste disposal site projects shown in [Appendix 2](#).

In addition, the ministry will include on the EBR additional information about the Limited Operational Flexibility under consideration, including:

- what Limited Operational Flexibility may allow,
- what Limited Operational Flexibility will not allow,
- expiry conditions and renewal requirements, if any,
- ongoing requirements, such as monitoring and reporting or inspection availability.

## Examples of Modifications that Do Not Qualify for Limited Operational Flexibility

Table 13: Shows examples of types of modifications for which the ministry does not grant Limited Operational Flexibility:

Category	Examples where the ministry would not issue an ECA with Limited Operational Flexibility
Increases in capacity or area	<ul style="list-style-type: none"> <li>for sewage works that would permit an increase in the rated capacity of the sewage works.</li> <li>for sewage works to expand or reduce the catchment area serviced by a stormwater management facility.</li> <li>for increases in the physical size of a waste disposal site.</li> </ul>
Modifications affecting emissions	<ul style="list-style-type: none"> <li>modifications where the project, process, equipment or works are under a non-compliance order or where they have exceeded the limits allowed in their approval.</li> <li>for sewage works to make changes to the works that would affect effluent quantity and quality or effluent receiver location. <ul style="list-style-type: none"> <li>larger orifice on a storm sewer outfall</li> <li>relocation of an outfall structure</li> </ul> </li> <li>modifications including equipment with specific operational limits. <ul style="list-style-type: none"> <li>equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any equipment specifically referenced in any published ministry policy or guideline document that specifies criteria that the Director must consider in the approval process.</li> </ul> <p><b>TIP:</b> See <i>Basic Comprehensive Certificates of Approval (Air) User Guide</i> [PIBS 4391] for more information.</p> </li> <li>change of process chemicals/materials and operations that may constitute a significant change, or a change that may alter the intent of operations and that may have impact on sewage works, effluent quantity and quality.</li> </ul>
Modifications outside of the operational envelope	<ul style="list-style-type: none"> <li>introduction of new waste types (for example, hazardous waste, liquid industrial waste, or residential or domestic waste) if not previously approved or contained within the engineer's report).</li> <li>introduction of a new processing operation not related to the function of the existing ECA (for example, a Waste Disposal Site approved as a waste transfer station or material recovery facility cannot become a composting, soil bioremediation or thermal treatment facility).</li> <li>introduction of any processes, equipment and works that the ministry was not asked to consider as part of the operating envelope.</li> <li>changes not defined in the engineer's report or that would require the engineer's report to be revised.</li> </ul>
Regulatory implications	<ul style="list-style-type: none"> <li>modifications to the works that have requirements under the OWRA.</li> <li>changes to the project or site that require approval under the EAA.</li> </ul>



## Applications Requesting Limited Operational Flexibility – Projects with Air Emissions

### Facility Production Limit

Limited Operational Flexibility allows an applicant to make modifications to a facility up to an approved facility production limit as long as the effects of these modifications meet the requirements of all other conditions of the ECA, most notably compliance with the performance limits. The facility production limit relates to the main product(s) produced at the facility and represents the design capacity of the facility's operations.

Limited Operational Flexibility does not allow an ECA holder to undertake modifications that would increase the facility production limit above the value specified on the ECA, without first obtaining an amendment to the ECA.

You must provide a numerical value that represents the overall production limit or capacity of the facility. This production limit will be used by the review engineer to define a facility production limit that the ministry will place on the ECA.

Please refer to *Basic Comprehensive Certificates of Approval (Air) User Guide* [PIBS 4391] if additional information is required to establish the facility production limit.

### Contaminants with no Ministry POI Limits

Note that once the Director has issued an ECA with Limited Operational Flexibility and a new contaminant with no ministry POI Limit is identified, or the emission rate for a contaminant with no ministry POI Limit increases above what was previously approved, the ECA requires the holder to conduct a maximum concentration level assessment of the predicted concentration at POI as a result of the proposed modification. (This process was also referred to as a maximum concentration level derived by the company). In general, the conditions in the ECA will require the ECA holder to:

- provide a maximum concentration level assessment for the facility based on the revised maximum emission rate scenario for the contaminant(s) in question;
- submit the maximum concentration level assessment to the ministry for review; and
- refrain from making the modification for a 30-day period from acknowledgment of the submission of the maximum

concentration level assessment to the ministry unless specifically permitted, in writing, by the Director.

## Applications Requesting Limited Operational Flexibility – Projects with Noise

You must provide an Acoustic Assessment Report (AAR) with your application for an ECA with Limited Operational Flexibility (Noise).

**TIP:** The requirements for the preparation of the AAR are found in Part C, Form Section 6.3: Supporting Documentation and Technical Requirements – Noise and Vibration.

If you wish to make a modification that may alter the noise emissions from the facility, you will have to demonstrate that the ministry noise guidelines will continue to be met after implementing the modification. Further information on the subsequent documentation requirements for such modifications can be found in: *Basic Comprehensive Certificates of Approval (Air) User Guide* [PIBS 4391].

## Applications Requesting Limited Operational Flexibility – Projects that Include Waste Disposal Sites or Sewage Works

### Mandatory Consultation with District Office

If you are submitting an application for an ECA with Limited Operational Flexibility for a waste or sewage project you are required to consult with the district office to discuss any site-specific issues that should be addressed in your application. You must identify in the *supplemental application information* section of the form the person who you consulted with at the district office. You will be ineligible for an ECA with Limited Operational Flexibility if there is significant local concern, including a history of outstanding environmental issues or complaints.

### Mandatory Consultation with Local Municipalities

If you are submitting an application for an ECA with Limited Operational Flexibility for a waste or sewage project, you are required to carry out pre-consultation with the local municipal

authorities (upper and lower tier, as appropriate) before submitting your application. The pre-consultation must include discussions with the municipality about how any local by-laws, site plan control agreements or other land use management instruments might affect your project's operating envelope for the purposes of an ECA with Limited Operational Flexibility.

Before submitting your application you must address other concerns raised by the municipality. If a municipality expresses significant concerns about an application, the Director may consider the project ineligible for Limited Operational Flexibility.

## Preparation of an Engineer's Report

If you submit an application for an ECA with Limited Operational Flexibility for a waste or sewage project, you are required to provide an engineer's report that defines the project's operational envelope. The engineer's report is made available as part of the public record under the EBR. Any change to this engineer's report will require an application to amend the ECA.

**TIP:** Note that the Design and Operations Report (for waste) or the Design Report (for sewage) reflects the actual design and operational activities, etc. of your proposed activity. It is the engineer's report that explains the operational envelope that will define what modification you will be allowed to make under Limited Operational Flexibility.

The engineer's report must be prepared and stamped by a qualified professional engineer who must verify the details of the site design and operations and must include a statement of accountability indicating that the information presented in the report is accurate. Note that this engineer may also be the individual identified by the applicant as the technical contact.

The engineer's report must contain:

1. Statements regarding the engineer's commitment to specific engineering standards, design codes, ministry guidance documents and industry best management practices that the applicant will adhere to in making any changes to the site or works.
2. Details of any design constraints imposed on the site by municipal by-laws (including site plan control agreements), the Ontario Fire Code and the Ontario Building Code (for example, operating hours, noise by-laws, setbacks, pile height limitations, quantity and fire suppression)

or conservation authorities (in the case of stormwater management).

3. Detailed identification and assessment of the changes that can be made to the site or works under the operational envelope for Limited Operational Flexibility.
4. For Waste projects:
  - A detailed analysis substantiating/supporting the maximum quantity of waste that could be safely stored at the site. This will be the maximum amount of waste that could be stored at the site under the operational envelope. The proposed locations where waste can be stored should be identified with regard to unprocessed, in-process and processed wastes.
  - A detailed analysis to substantiate/support the maximum quantity of waste that can be processed at the site on a daily basis. This amount will represent the maximum daily threshold receiving limit under the operational envelope.
5. For sewage projects: appropriate conservation authority clearance and zoning approvals, as necessary.
6. A statement declaring that the proposed modifications would not likely to result in an adverse effect.

The following statement must be signed and dated by the engineer who prepared the engineer's report:

*I am a representative of (company name) and I am authorized and have the knowledge to make the following statements:*

- *I have used engineering or scientific principles in accordance with current and generally accepted ethics and practices, as recognized by members of environmental engineering or science professions/disciplines for sites in similar geographic locations.*
- *In preparing the engineer's report, I have independently verified that details of the design and operations report and engineer's report, and to the best of my knowledge, the information presented in the reports are accurate.*
- *I have not knowingly withheld any information necessary for the applicant and/or technical contact to complete the application.*

The identified project technical contact for the application must sign both statements.

For more information on the format and content of these statements, please refer to the sample application packages on the ministry website.



# e Non-standard Cases

**In this Part of the guide we discuss how you get approval in the following non-standard cases:**

- approval of sewage works through the Transfer Review Program;
- approvals subject to Ministry Approval of Final Plans and Specifications; and
- Municipal Waste Pilot Projects.

## Transfer of Review for Sewage Works

Applications for approval of sewage works having low technical complexity and low potential for significant environmental or public health impact and that are proposed to be located within certain designated municipalities may take advantage of the Transfer of Review Program.

Under the Transfer of Review Program a designated municipal authority reviews the ECA Application and supporting documentation on behalf of the ministry. The municipal authority then submits the application to the ministry with its recommendation for approval or its comments explaining why it is not recommending approval.

The types of works covered by the Transfer Review Program depend on individual agreements between the ministry and the designated municipal authority, though they usually include storm and sanitary sewers (except for new stormwater outfalls), sewage pumping stations and forcemains (except for those pumping directly to a sewage treatment plant) and, in some cases, stormwater management facilities.

The municipal authorities participating in the Transfer of Review Program are listed in Appendix 3, which also lists the types of water and sewage works that the individual municipal authorities are authorized to review on behalf of the ministry.

The ministry recommends that before you submit an application to a designated municipal authority for review under the Transfer of Review Program you contact the engineering department of the municipal authority to confirm that applications for approval of the particular type of works you propose qualify for processing under the Transfer of Review Program.

## Approvals in Principle Subject to Final Plans and Specifications (Sewage Works)

In some circumstances you can ask the Director to issue an approval in principle for works whose detailed engineering design has not been finalized, provided the design has advanced to the stage where all significant technical decisions having a potential to affect performance and/or environmental impact of the works have been made. Note, however, that an approval in principle is not an authorization to construct the proposed works.

An approval in principle will include a special condition prohibiting construction of any part of the project until the director has:

- received detailed engineering design drawings, specifications and a final engineering design report containing detailed design calculations for that part of the works, and
- approved, in writing, the plans.

The ministry will only consider requests for approvals in principle subject to final plans and specifications (also referred to as staged approvals) where you have included with your ECA Application, adequate written justification for the proposed course of action. The ministry highly recommends that if you intend to take this route, you discuss the issue in pre-application consultation with the ministry.

A request for an approval in principle will be considered if the entity financing or approving the financing of the project (for example, the Ontario Municipal Board) requires the applicant to provide proof of the ministry's acceptance of the proposal before they agree to release funds for the undertaking of the detailed engineering design.

Similarly, the Director may issue an approval in principle (subject to the director's separate approval of the final engineering design for the proposed works, or its part) for a large project with agreed upon phased implementation of its various components, or a *design-build* project, such as a project intended to be implemented through a single contract between the applicant and a contractor who would both design and construct the works.

In the ministry's experience, the submitted final design often introduces significant changes to the preliminary design approved in principle, which then requires in-depth reanalysis of the entire proposal. Such reanalysis usually significantly increases the total time the ministry has to spend reviewing the proposal.

## Pilot Projects

If you are applying for an approval regarding a municipal waste or sewage works pilot project you must engage in pre-application consultation with the ministry.

Further, the criteria for defining a municipal waste pilot project site and the regulatory requirements pertaining to ECAs for such a site can be found in Ontario Regulation 347 R.R.O. 1990 section 5.0.1. These regulatory requirements are in addition to the approval requirements and are based on the proposed processes and the types of waste to be managed at the site.



# Abbreviations

Here are some abbreviations used in this guide.

**A-AAR** – Abbreviated Acoustic Assessment Report

**AAR** – Acoustic Assessment Report

**ADMGO** – *Guideline A-11: Air Dispersion Modelling Guideline for Ontario* [PIBS 5165e02]

**ATAD** – autothermal thermophilic aerobic digestion

**BN** – Business Number

**C(s) of A** – Certificate(s) of Approval

**C&D** – construction & demolition

**CCME** – Canadian Council of Ministers of the Environment

**CO** – Carbon Monoxide

**CWA** – Clean Water Act, 2006

**CSA** – Canadian Standards Association

**CSO** – Combined Sewage Overflow

**CSIC** – Canadian Standard Industrial Classification

**EA** – Environmental Assessment

**EAA** – Environment Assessment Act

**EAB** – Environmental Approvals Branch

**EAASIB** – Environmental Approvals Access and Service Integration Branch

**EASR** – Environment Activity and Sector Registry

**EBR** – Environmental Bill of Rights

**ECA** – Environmental Compliance Approval

**EPA** – Environment Protection Act

**ERT** – Environmental Review Tribunal

**ESDM** – Emission Summary and Dispersion Modelling

**ESP** – Environmental Screening Process

**FIPPA** – Freedom of Information and Protection of Privacy Act

**FOI** – Freedom of Information

**GLC** – Ground Level Concentration

**GLUMRB** – Great Lakes-Upper Mississippi River Board

**GPS** – Global Positioning System

**HVAC** – Heating, Ventilation and Air Conditioning

**IC&I** – Industrial, Commercial and Institutional

**ISIC** – International Standard Industrial Classification

**JSL** – Jurisdictional Screening Level

**MDWP&L** – Municipal Drinking Water Permit and License

**MEA** – Municipal Engineers Association

**MFIPPA** – Municipal Freedom of Information and Protection of Privacy Act, R.S.O 1990

**MISA** – Municipal/Industrial Strategy for Abatement

**MLC** – Maximum Concentration Level

**MOE** – Ministry of Environment

**MSW** – Municipal Solid Waste

**NAAP** – Noise Abatement Action Plan

**NAD27** – North American Datum 1927

**NAD83** – North American Datum 1983

**NAICS** – North American Industry Classification System

**NASM** – Non-Agricultural Source Materials

**NCM** – Noise Control Measure

**NEPDA** – Niagara Escarpment Planning and Development Act

**NETE** – New Environmental Technology Evaluation

**NMA** – Nutrient Management Act, 2002

**NOx** – Nitrogen Oxides

**NPC** – Noise Pollution Control

**OIA** – Odour Impact Assessment

**OMAFRA** – Ontario Ministry of Agriculture Food and Rural Affairs

**O. Reg.** – Ontario Regulation

**ORMCP** – Oak Ridges Moraine Conservation Plan

**OWRA** – Ontario Water Resources Act

**P&IDs** – Piping and Instrumentation Diagrams

**PCB** – polychlorinated biphenyl

**PFD** – Process Flow Diagram

**PIBS** – Public Information Banking System

**PNS** – Primary Noise Screening

**POI** – Point of Impingement

**POR** – Point of Reception

**PPD** – Plan and Profile Drawing

**s.** – section (reference to a section of a regulation or legislation)

**SBR** – sequential batch reactors

**SCADA** – Supervisory Control and Data Acquisition

**SCFM** – standard cubic feet per minute

**SDB** – Standards Development Branch

**SDWA** – Safe Drinking Water Act

**SNS** – Secondary Noise Screening

**SO<sub>2</sub>** – Sulphur Dioxide

**SRU** – Streamlined Review Unit

**ss.** – sub sections (reference to sub sections of a regulation or legislation)

**TC** – Technical Contact

**TDH** – total dynamic head

**TMA** – Tailings Management Area

**TSP** – Total Suspended Particulate

**URT** – Upper Risk Threshold

**UV** – Ultraviolet

**USSIC** – United States Standard Industrial Classification

**UTM** – Universal Transverse Mercator

**VOC** – Volatile Organic Compound

**WDF** – Waste Derived Fuels

**WMS** – Waste Management System

# Appendix 1.

## Typical Sewage Works Projects and their Qualification for Limited Operational Flexibility

In this appendix we consider different activities that might be carried on at a sewage works project and comment on whether such projects are likely to qualify for an ECA with Limited Operational Flexibility.

Keep in mind that the examples listed are general in nature and to qualify for Limited Operational Flexibility the engineer's report should include a table detailing specific activities that would be covered under an ECA with Limited Operational Flexibility.

### Municipal and Private Sewage Works

Table 1 shows the most common activities for Municipal and Private Sewage Works, noting whether they qualify for Limited Operational Flexibility. Table 1 was adapted and expanded from the Municipal Class Environmental Assessment activity tables for projects considered Schedule A and Schedule A+.

Table 14: Municipal and Private Sewage Works

No.	Activity	Afforded Limited Operational Flexibility?	
		Yes	No
1.	Normal/Emergency operational activities. <sup>4</sup>	<input checked="" type="checkbox"/>	
2.	Increasing pumping station capacity by adding or replacing equipment where new equipment is located within an existing building or structure and where the existing rated capacity is not exceeded.	<input checked="" type="checkbox"/>	
3.	Expanding/refurbishing/upgrading sewage treatment plant including outfall up to existing rated capacity where no land acquisition is required.		<input checked="" type="checkbox"/>
4.	Installing chemical or other process equipment for operational or maintenance purposes in existing sewage collection system or existing sewage treatment facility.	<input checked="" type="checkbox"/>	
5.	Providing additional treatment facilities in existing lagoons, such as aeration, chemical addition, post treatment, including expanding lagoon capacity up to existing rated capacity, provided no land acquisition nor additional lagoon cells are required.		<input checked="" type="checkbox"/>

#### 4 Normal or emergency operational activities may include, but are not limited to, the following:

- modifying, repairing, reconstructing existing facilities to provide operational, maintenance or other improvements, such as reducing odour, insulating buildings to reduce noise levels or to conserve energy, landscaping
- ongoing maintenance activities
- normal operation of sewage treatment plants
- installation of new service connections, catch basins and appurtenances from existing sewers
- carrying out maintenance and/or minor improvements to grounds and structures
- the addition of minor buildings, sheds and equipment and materials storage areas
- doing repairs, cleaning, renovations, or replacement of sewage treatment facilities, pumping plant equipment or outfalls

Table 14: Municipal and Private Sewage Works – continued

No.	Activity	Afforded Limited Operational Flexibility?	
		Yes	No
6.	Expanding the buffer zone between a lagoon facility or land treatment area and adjacent uses where the buffer zone is entirely on the applicant's land.	<input checked="" type="checkbox"/>	
7.	Disposing of, utilizing or managing biosolids on an interim basis (for example, further treatment in drying beds, composting, temporary holding at transfer stations), at: <ul style="list-style-type: none"> <li>• an existing sewage treatment plant where the biosolids are generated, or</li> <li>• an existing landfill site, incinerator or organic soil conditioning site, where the biosolids are to be utilized or disposed of.</li> </ul>		<input checked="" type="checkbox"/>
8.	Establishing a new biosolids organic soil conditioning site.		<input checked="" type="checkbox"/>
9.	Increasing sewage treatment plant capacity beyond existing rated capacity through improvements to operations and maintenance activities only, but without construction of works to expand, modify or retrofit the plant or the outfall to the receiving water body, with no increase to total mass loading to receiving water body as identified in the ECA.		<input checked="" type="checkbox"/>
10.	Establishing, extending or enlarging a sewage collection system and all necessary works to connect the system to an existing sewage outlet, where doing so is required as a condition of approval on a site plan, consent plan of subdivision or plan of condominium that will come into effect under the Planning Act before the construction of the collection system.		<input checked="" type="checkbox"/>
11.	Establishing new, replacing or expanding existing stormwater detention/retention ponds or tanks and appurtenances, including outfall to receiving water body, provided that all such facilities are in either an existing utility corridor or an existing road allowance.		<input checked="" type="checkbox"/>
12.	Replacing traditional materials in an existing watercourse or in slope stability works with material of equal or better properties at substantially the same location and for the same purpose.	<input checked="" type="checkbox"/>	
13.	Reconstructing an existing dam weir at the same location and for the same purpose, use and capacity.	<input checked="" type="checkbox"/>	
14.	Expanding, improving or modifying existing patrol yards, equipment and material storage facilities, maintenance facilities and parking lots for service vehicles, where no land acquisition is required.	<input checked="" type="checkbox"/>	
15.	Constructing sewage projects planned and approved under O. Reg. 586/06 (Local Improvement Charges — Priority Lien Status).	<input checked="" type="checkbox"/>	
16.	Constructing roadside ditches, culverts and other such incidental stormwater works constructed solely for the purpose of servicing municipal road works.	<input checked="" type="checkbox"/>	
17.	Construction of stormwater management facilities that are required as a condition of approval on a consent, site plan, plan of subdivision or condominium that will come into effect under the Planning Act before the construction of the facility.		<input checked="" type="checkbox"/>

Table 14: Municipal and Private Sewage Works – continued

No.	Activity	Afforded Limited Operational Flexibility?	
		Yes	No
18.	Establishing, extending or enlarging a sewage collection system and all necessary works to connect the system to an existing sewage or natural drainage outlet, provided all such facilities are in either an existing road allowance or an existing utility corridor, including the use of trenchless technology for water crossings.		<input checked="" type="checkbox"/>
19.	Retiring a facility that would have been planned under Schedule A or Schedule A+ of the Municipal Class EA for its establishment.		<input checked="" type="checkbox"/>
20.	Increasing pumping station capacity by adding or replacing equipment where new equipment is located within an existing building or structure and where the existing rated capacity is exceeded.		<input checked="" type="checkbox"/>
21.	Installation or replacement of standby power equipment where new equipment is located in an existing building or structure.	<input checked="" type="checkbox"/>	
22.	Modifying, retrofitting or improving a retention/detention facility, including outfall or infiltration system, for the purpose of stormwater quality control. Biological treatment through the establishment of constructed wetlands is permitted.		<input checked="" type="checkbox"/>
23.	Installation of automation and control equipment, SCADA systems, including the replacement of pumping equipment on existing buildings, provided that the existing rated capacity is not exceeded.	<input checked="" type="checkbox"/>	



## Industrial Sewage Works

Table 15 shows the most common activities for Industrial Sewage Works, noting whether Limited Operational Flexibility is afforded for such activities.

Table 15: Industrial Sewage Works

No.	Activity	Afforded Limited Operational Flexibility?	
		Yes	No
1.	Modifications to the freeboard elevation on sewage ponds, provided all such modifications are included within the engineer's report specs and dam stability is not compromised.	<input checked="" type="checkbox"/>	
2.	Changes to the monitoring conditions as approved in writing by the district office, provided that positive feedback is obtained first from the ministry regional technical support.	<input checked="" type="checkbox"/>	
3.	Minor equipment changes and installation of chemical or other process equipment for operational or maintenance purposes in existing sewage collection system or existing sewage treatment facility (for example, location, treatment and process chemicals being used) with no impacts to plant capacity and final effluent quality and quantity.	<input checked="" type="checkbox"/>	
4.	Normal/Emergency operational activities. <sup>5</sup>	<input checked="" type="checkbox"/>	
5.	Increasing pumping station capacity by adding or replacing equipment where new equipment is located within an existing building or structure and where the existing rated capacity is not exceeded.	<input checked="" type="checkbox"/>	
6.	Expanding the buffer zone between sewage works or land treatment area and adjacent uses where the buffer zone is entirely on the applicant's land and when minimum separation distance guidelines are observed. ( <i>Guideline D-2: Compatibility between Sewage Treatment and Sensitive Land Use</i> [PIBS 2294])	<input checked="" type="checkbox"/>	
7.	Expanding, improving or modifying existing patrol yards, equipment and material storage facilities, maintenance facilities and parking lots for service vehicles, where no land acquisition is required.	<input checked="" type="checkbox"/>	
8.	Installing or replacing standby power equipment where new equipment is located in an existing building or structure.	<input checked="" type="checkbox"/>	
9.	Installing of automation and control equipment, SCADA and instrumentation systems, including the replacement of pumping equipment on existing buildings, provided that the existing rated capacity is not exceeded.	<input checked="" type="checkbox"/>	

**5 Normal or emergency operational activities may include, but are not limited to, the following:**

- modifying, repairing, reconstructing existing facilities to provide operational, maintenance or other improvements, such as reducing odour, insulating buildings to reduce noise levels or to conserve energy, landscaping
- ongoing maintenance activities
- normal operation of sewage treatment plants
- installation of new service connections, catch basins and appurtenances from existing sewers
- carrying out maintenance and/or minor improvements to grounds and structures
- the addition of minor buildings, sheds and equipment and materials storage areas
- doing repairs, cleaning, renovations, or replacement of sewage treatment facilities, pumping plant equipment or outfalls
- cleaning, relining, repairs and renovations to existing sewage collection system installation or replacement of standby power equipment where new equipment is located within an existing building or structure

## Appendix 2.

# Sample Project Descriptions for Application Summary Section

This Appendix shows the requirements for the form and content of the project description executive summary section of the ECA Application Form.

### Proposal for ECA involving multiple media

This application is for a new Environmental Compliance Approval as required by Environment Protection Act s. 9 and s. 27 for the use and operation of a single 13.8 hectare waste disposal site, within a total area of 27.6 hectares, to be used for the construction and operation of a composting facility to manage source separated organic waste (food waste and non-recyclable tissue) and leaf and yard waste.

Source separated organic waste will be composted within a 2,060 m<sup>2</sup> building equipped with pollution control equipment. Leaf and yard waste and compost curing will take place outdoors. The equipment includes: active windrows for leaf and yard waste composting, grinding, shredding and screening equipment, one (1) emergency generator and one (1) biofilter.

The service area for the composting facility includes the residential and industrial, commercial and institutional sectors of the municipalities of Somewhere County.

The composting facility has a proposed maximum daily receiving rate of 200 tonnes per day and a maximum storage limit of 17,600 tonnes at any one time. Operating hours are

Table 16

Requirement	Interpretation for Waste Disposal Sites
The reason for the application.	State whether it is for a new or amended ECA
A description of the purpose for the proposal, or of the operations you propose carrying on, that is, what is the business occurring at the site where your project will take place.	State what type of waste disposal site your proposal involves.
The main components or processes – this should include the main equipment or modifications, including pollution/noise control equipment or measures and a description of the source the pollution/noise control equipment is meant to control.	List the main processes occurring at the site, such as landfilling, grinding, processing, incinerating, shredding, etc. Also list any pollution control equipment or measures, such as watering to control dust.
A description of the key operating parameters – this description should indicate the scale of the business, including hours of operation.	This should include days and hours of operation, life expectancy of a landfill, service area or source of material, storage/transfer/receiving/disposal capacity per day, maximum storage capacity, total area of site.
A description of the discharges and/or waste characteristics	A description of waste (type, category, class) and any other discharges anticipated. For example, non-hazardous household waste.
If your application is for an ECA with Limited Operational Flexibility, this should be indicated.	A description of the flexibility that is being applied for and a description of the site as it will initially operate.

Monday to Friday 6:00 am to 7:00 pm, Saturday 6:00 am to 2:00 pm, 312 operating days per year.

The expected contaminants that will be emitted from this facility are products of combustion, particulate matter, ammonia, total reduced sulphur and odour.

## Proposals for Waste Disposal Sites

Table 16 lists the requirement from Part D and how it should be interpreted as demonstrated by the following examples.

### Proposal for a New Waste Disposal Site (Processing/Transfer)

This proposal is for a new Environmental Compliance Approval (waste disposal site) for the use and operation of a waste disposal site with a total site area of 1.5 hectares, to be used for processing solid non-hazardous waste including roofing waste (shingles, wood, nails) up to 100 tonnes per day. The total amount of waste and processed materials stored at the site will not exceed 300 tonnes at any time. Processes to be used include grinding and shredding. The waste disposal site is to serve the Province of Ontario. The hours of operation are from 8:00 am to 5:00 pm, Monday to Friday.

### Proposal for a New Waste Disposal Site (Landfill)

This proposal is for a new Environmental Compliance Approval (Waste Disposal Site) for the use and operation of a 1.1 hectare waste disposal site within a total area of 1.1 hectares and a receiving capacity of 7 cubic metres per day, for the landfilling of the following categories of waste: tree parts, wood chips, waste bark, ash, limb remnants, shavings, occasional scrap boards and wood waste cuttings. The site will have a final volumetric capacity of 40,000 cubic metres and an anticipated life expectancy of 20 years to serve the Province of Ontario. The hours of operations are from 7:00 am to 5:00 pm, Monday to Friday.

### Proposal for an Amendment Application

This proposal is for an amendment to the existing Environmental Compliance Approval (waste disposal sites) No. 1234-123ABC issued for the use and operation of a waste disposal site with a total site area of 1.5 hectares, to be used for transfer and

processing of solid non-hazardous waste, including construction demolition waste. The proposal includes changes to the total processing capacity of waste from 100 tonnes to 200 tonnes per day. The total amount of waste and processed materials stored at the site is proposed to change from 200 tonnes to 300 tonnes at any time. The waste disposal site is to serve the Province of Ontario. The hours of operation are from 8:00 am to 5:00 pm, Monday to Friday.

### Proposal for an Environmental Compliance Approval with Limited Operational Flexibility for a Waste Disposal Site (formerly a Comprehensive Certificate of Approval)

This proposal is for a new Environmental Compliance Approval with Limited Operational Flexibility for a waste disposal site for a non-hazardous waste transfer and processing facility to be located at XXX Drive, Anytown, Ontario. Limited Operational Flexibility for a waste disposal site provides a company with flexibility to make changes to defined aspects of the site's operations without a requirement to make an application for amendment. It includes conditions that describe the scope within which the changes can be made. It allows industry to plan and to make changes to their facilities in a timely manner and reduce the delays associated with the traditional approvals process.

Limited Operational Flexibility incorporates additional conditions to ensure that the Ontario Ministry of the Environment is kept informed of the continued site operations, that the company remains in compliance with legislative requirements and that the environment is not adversely affected. The extent to which operational flexibility is permitted by the Environmental Compliance Approval for a waste disposal site is contained within an engineer's report provided by the proponent.

The details of the Limited Operational Flexibility requested in this proposal are described below.

This proposal is for the use and operation of a waste disposal site operating 24 hours per day, seven days per week, serving the Province of Ontario with a total area of 2,200 square metres, to be used for the following:

- The processing and temporary storage of non-hazardous solid municipal waste, including: residential waste, industrial, commercial, institutional (IC&I) waste, construction and demolition (C&D) waste.

- The receipt, transfer and storage of domestic/residential waste in the event of an emergency situation that results in an inability of a municipality in Ontario to manage its waste under the existing network of waste disposal site Environmental Compliance Approval. For example, the closing of the U.S. Canada border to waste shipment, or a municipal strike.
- Storage of waste at the site will be limited to a maximum of 500 tonnes at any one time.
- The waste disposal site will initially receive and process a maximum of 219,000 tonnes of waste per year. This amount is the equivalent of an average of 600 tonnes per day over the course of a year (365 days). This will enable the waste disposal site to receive more waste per day during peak periods to account for seasonal fluctuations in waste generation. The site will be limited to receiving a maximum of 1,200 tonnes of waste in any one day.

The scope of Limited Operational Flexibility for the proposed waste disposal site is limited to the operating envelope described and contained within the engineer's report and as follows:

1. The ability to make modifications to the infrastructure of the waste disposal site. For example, the proponent would be able to expand the existing building a further 2,500 square metres.
2. The ability to make modifications to the waste disposal site's processing operations and equipment. For example, the proponent would be able to transform a manual waste handling operation into a fully automated handling facility.
3. The ability to make modifications to the waste disposal site that are routine, with predictable effects that are environmentally insignificant. For example the proponent would be able to construct a fence, add a new gate and expand/relocate an existing parking lot. Modifications considered to be administrative would also not require an approval.
4. The ability to increase the amount of waste that may be received at the waste disposal site to an amount not to exceed 365,000 tonnes of waste per year. This amount is the equivalent of an average of 1,000 tonnes per day over the course of a year (365 days). This will enable the waste disposal site to receive more waste per day during peak periods to account for seasonal fluctuations in waste generation. The site will be limited to receiving and

processing a maximum of 2,500 tonnes of waste in any one day. This amount is equivalent to the daily processing threshold identified within the engineer's report.

The following modifications to the waste disposal site are not permitted under the proposal:

1. The ability to extend the physical size of the waste disposal site.
2. The ability to alter the function of the approved operations of the waste disposal site from a waste disposal site used for the sorting and transfer of solid municipal waste.
3. The ability to change the type of waste that can be received at the site and in particular, the ability to accept hazardous waste, liquid industrial waste or hauled sewage.
4. The ability to increase the maximum amount of waste that is allowed to be stored at the site beyond the approved maximum of 500 tonnes.
5. Any modification to the waste disposal site that requires a change to the engineer's report.
6. Any modifications to the waste disposal site that are subject to the Environmental Assessment Act.

## Proposals for Air Applications

Table 17 below lists the requirement from Part D and how it should be interpreted as demonstrated by the following examples.

Table 17

Requirement	Interpretation for Air Applications
The reason for the application.	State whether it is for a new or amended ECA
A description of the purpose for the proposal. What is the business occurring at the site where your project will take place? The operation you propose to carry on?	State what type of facility your proposal involves, for example, a car manufacturing facility or a plastic extrusions plant.
The main components or processes – this should include the main equipment or modifications, including pollution/noise control equipment or measures and a description of the source the pollution/noise control equipment is meant to control.	List the main processes occurring at the site, such as painting, metal coating, HVAC, etc. Also list any pollution control equipment or measures, such as baghouses.
A description of the key operating parameters – this description should indicate the scale of the business, including hours of operation.	This should include days and hours of operation and any parameters that describe the facility, for example, the number of parts produced per year.
A description of the discharges and/or waste characteristics	A description of the significant emissions.
If your application is for an ECA with Limited Operational Flexibility this should be indicated.	Follow the template below.

### Proposal for a New Application

This proposal is for a new Environmental Compliance Approval (Air) for Acme Window Corporation for manufacturing vinyl and wood frame window products at a facility located in Concord, Ontario. This application is for the operation of maintenance welding, combustion equipment, adhesives, sealants and a glycerin-based vinyl shaping operations. Emission contaminants into the atmosphere include volatile organic compounds, nitrogen oxides and particulate matter. The facility will operate 5 days a week, 8:00 am to 5:00 pm.

### Proposal for a New Mobile Unit

This proposal is for a new Environmental Compliance Approval (Air) for Acme Products Inc. This application is for one (1) mobile tub grinder used to grind wood waste, such as tree parts, limb remnants, shavings, occasional scrap boards wood waste cuttings into wood chips. The facility will be used for the manufacturing of scrap wood chips and dust. Contaminant emissions to the atmosphere include particulate matter and products of combustion, such as nitrogen oxides.

## Proposal for an Amendment

This proposal is for an amendment to Environmental Compliance Approval (Air) No.123-123ABC by Acme Canada Company for the facility located in Sarnia, Ontario. This application is for replacement of one (1) flare and for the addition of one (1) chlorine dioxide scrubber and one (1) emergency generator. Contaminant emissions to the atmosphere include volatile organic compounds such as methanol, isobutane and propane and products of combustion such as nitrogen oxides. The facility produces propane, isobutane and butane from natural gas liquids and operates 7:00 am to 4:00 pm, Monday to Friday.

## Proposal for a New ECA with Limited Operational Flexibility for an Air Application

This proposal is for a new Environmental Compliance Approval with Limited Operational Flexibility (Air) which is a single Environmental Compliance Approval that replaces the existing Environmental Compliance Approvals (Air) and includes the addition of new or historically unapproved sources for all emissions from Acme Ceramic Materials Canada Inc., manufacturing fused metal oxides for use in abrasive applications, located in the City of Toronto, Ontario. This proposal includes all emission sources from the manufacturing and associated processes that exhaust to the atmosphere including furnaces, dust collectors, crushers, laboratory fume hoods and ancillary combustion equipment. Emissions to the atmosphere from this facility include graphite, calcium oxide, manganese oxide, particulate matter and products of combustion, such as nitrogen oxides.

The Environmental Compliance Approval with Limited Operational Flexibility (Air) requires that the company demonstrate compliance on an ongoing basis with Ontario Regulation 419/05, applicable ministry guidelines for air and noise and other performance requirements as specified in their conditions. It permits modifications such as process changes, de-bottlenecking or addition of new equipment subject to limits on operational flexibility that include a production limit for the facility to be specified on the Environmental Compliance Approval (Air). The Limited Operational Flexibility conditions have a five-year expiry date. The company will be required to make application for an amendment at that time to renew these conditions. Of specific public interest, one condition that will be included in the Environmental Compliance Approval (Air) will

require the company to make available during business hours, a table (Emission Summary Table) that documents the facility's compliance with O. Reg. 419/05.

## Proposal for a Limited Operational Flexibility Renewal (Air)

This proposal is for the renewal of the Limited Operational Flexibility for an Environmental Compliance Approval (Air & Noise) #1234-ABCDEF from Acme Printing Inc., a commercial lithographic facility located in the City of Toronto, Ontario. This proposal includes all emission sources from the manufacturing and associated processes that exhaust to the atmosphere including heatset presses with associated dryers, a regenerative thermal oxidizer, cooling towers and combustion equipment. Emissions to the atmosphere from this facility include volatile organic compounds, nitrogen oxides and ethylene glycol.

The Environmental Compliance Approval with Limited Operational Flexibility (Air) requires that the company demonstrate compliance on an ongoing basis with Ontario Regulation 419/05, applicable ministry Guidelines for Air and Noise and other performance requirements as specified in their conditions. It permits modifications such as process changes, de-bottlenecking or addition of new equipment, subject to limits on the Limited Operational Flexibility that include a production limit for the facility. The Company has submitted an application to renew the existing Limited Operational Flexibility conditions for an additional five-year period. Of specific public interest, one condition that will be retained on the renewed Environmental Compliance Approval (Air) will require the company to make publicly available during business hours at the facility, a table (Emission Summary Table) that documents the facility's ongoing compliance.



## Proposal for Sewage Works Only

Table 18 below lists the requirement from Part D and how it should be interpreted as demonstrated by the following examples.

Table 18

Requirement	Interpretation for Waste Disposal Sites
The reason for the application.	State whether it is for a new or amended ECA.
A description of the purpose for the proposal, or of the operations you propose carrying on, that is, what is the business occurring at the site where your project will take place.	State what type of sewage works your proposal involves.
The main components or processes – this should include the main equipment or modifications, including pollution/noise control equipment or measures and a description of the source the pollution/noise control equipment is meant to control.	List the main processes occurring at the site, such as transmission, collection, etc. Also list any pollution control equipment or measures such as chemical injection for contaminant removal.
A description of the key operating parameters – this description should indicate the scale of the business, including hours of operations.	This should include days and hours of operation, size or treatment capacity, service area.
A description of the discharges and/or waste characteristics	A description of the sewage (quality and/or source), the receiver of the effluent and any other discharges anticipated. For example, domestic sewage from a campground or tailings pond for a gold mine.
If your application is for an ECA with Limited Operational Flexibility, this should be indicated.	A description of the flexibility that is being applied for.

## Proposal for a New Sewage Works (Stormwater)

This proposal is for a new Environmental Compliance Approval (Sewage Works) to install a new Northeast Irrigation Pond to collect stormwater runoff from approximately 3.6 hectares agricultural drainage area and operate as a closed loop irrigation system with no direct discharge to surface water except during emergency situations. The proposal is also for an approval to change the equalization and post-biofilter pump tank sizes and biofilter orientation for subsurface sewage disposal systems.

## Proposal for a New Sewage Works

This proposal is for a new Environmental Compliance Approval (Sewage Works) for ACME MR to establish sewage works for the collection, treatment and disposal of up to 2.47 million cubic metres of process water per year and an estimated 1.75 million cubic metres per year of stormwater runoff to service an area of 265 hectares at ACME MR's metal mining operations in AnyRemoteTown.

The nearest town is within 10 km of the mining facility. The mining facility operates 24 hours, 7 days a week.

The proposed sewage works will include a Tailings Management Facility, a reclamation system, an effluent water treatment plant, a constructed wetland system, engineering dams and dykes, a stormwater management system, and all associated structures and components to support the aforementioned systems.

## Proposal for an Amendment to Sewage Works

This proposal is to amend Environmental Compliance Approval (Sewage Works) No. ABCD-123ABC. The existing Environmental Compliance Approval covers the sewage works for the collection, transmission and storage of up to 10,500 cubic meters per day (7,280 litres per minute) of mine water from the ACME No. 2 Shaft (Big Mineral Project), for discharge into AnyLake.

The purpose of this proposal is to add the AnyLake Tailings Pond treatment system and to relocate the current point of discharge into the AnyLake Tailings Pond from the north shore to the northwest shore, to promote the settlement of total suspended solids through the use of flocculants and silt curtains, to control the soluble ammonia residuals resulting from the use of emulsion, or emulsion blend explosives and it will contain changes in the effluent quality requirements.

## Proposal for an Amendment to Sewage Works (Sewage Works Tailing Ponds)

This proposal is for an amendment to the Environmental Compliance Approval No. ABCD-123DSA, for the redevelopment of the former AnyLake Mine site as a new open pit mine and ore processing facility. The former AnyLake Mine facility will be expanded to include two (2) new tailings ponds. The entire Tailings Management Area (TMA) will be operated as an integrated system that will be used to manage both mill effluent and mine water. The mill will use a conventional gravity and cyanidation gold recovery circuit with in-plant treatment of the mill effluent prior to discharge to the TMA. The discharge to the North Lake will consist of treated mine water and runoff from inactive TMA cells. There will be no direct discharge of TMA effluent to the environment from the active TMA cells (cells receiving treated mill tailings).

## Proposal for an Amendment to Sewage Works (Industrial)

This proposal is to amend Environmental Compliance Approval (Sewage Works) No ABCD-123ABC. The existing approval covers the sewage works for the collection, transmission, treatment and disposal of mill operation for the MyMill Site, which consists of a two-stage tailings system to achieve the settling of solids prior to discharge, serving the milling operation

located in the Township of AnyTown, Ontario, with a maximum production of 255 tonnes/day of ore.

The proposed sewage works include the implementation of changes in the Tailings Management Area to include raising dams and the replacement of the existing decant weir and outlet structures to meet requirements of the Closure Plan and the annual dam safety inspections.

The proposed works may include a boron reduction strategy and changes in the effluent requirements.

## Appendix 3.

# Municipalities Currently Under the Transfer of Review Program

The types of works covered under the Transfer of Review Program are indicated in Table 19 for each participating municipal partner.

### Types of Works Reviewed

**Type A** – includes: storm and sanitary sewers (except for new stormwater outfalls), sewage pumping stations and forcemains (except for those pumping directly to a sewage treatment plant). Prior to the issuance of Municipal Drinking Water Works Permits and Licences (MDWP&L), watermains and water booster pumping stations were also included.

**Type B** – includes stormwater management works limited to works that control stormwater quantity and/or provide basic quality control only (that is, 60% total suspended solids removal) and that discharge to either the existing stormwater management collection system, a stormwater management works, a ditch, a swale or a municipal drain. Stormwater management works that discharge to a ditch, swale or municipal drain that are included in the Transfer of Review Program also require clearance from the local Conservation Authority. Stormwater management works are excluded from the Transfer of Review Program if:

- the works discharge to a 'natural' receiving watercourse, stream, river or lake;
- effluent quality criteria and/or monitoring requirements are established;
- the works are proposed to be located on *industrial land* or to drain *industrial land*, as defined by Ontario Regulation 525/98;
- the works relate to infiltration of the stored stormwater into the ground; and
- the works propose to collect/store and discharge stormwater containing substances or pollutants detrimental to the environment or human health.

Stormwater management works excluded from the Transfer of Review Program require submission of the Environmental Compliance Approval application directly to the ministry for review and processing.

**Type C** – these upper-tier municipalities provide Transfer of Review services for their respective lower-tier municipalities.

**Type D** – includes additional types of sewage works specified in an expanded Transfer of Review Program agreement.

### Municipal Drinking Water Permit & Licence

All municipalities were recently issued a Municipal Drinking Water Permit and Licence as indicated (MDWP&L).

Consequently, Environmental Compliance Approvals are no longer required for these municipalities for watermains, minor modifications or equipment with emissions to the atmosphere that are part of a municipal water system which has been issued a Drinking Water Permit and Licence.

Table 19: Participating Municipal Authorities and Types of Works under the Transfer of Review Program

Municipal Authority Program Partner	Types of Works Reviewed				Municipal Drinking Water Permit & Licence
	A	B	C	D	(MDWP&L)
The Corporation of the City of <b>Barrie</b>	✓	✓			✓
The Corporation of the City of <b>Brantford</b>	✓				✓
The Town of <b>Bradford West Gwillimbury</b>	✓	✓			✓
The Corporation of the City of <b>Brockville</b>	✓				✓
The Corporation of the Municipality of <b>Chatham-Kent</b>	✓				✓
The Regional Municipality of <b>Durham</b>	✓	✓	✓		✓
City of Greater <b>Sudbury</b>	✓				✓
The Corporation of the City of <b>Guelph</b>	✓				✓
The Regional Municipality of <b>Halton</b>	✓		✓		✓
City of <b>Hamilton</b>	✓				✓
The Corporation of the City of <b>Kingston</b>	✓				✓
The Corporation of the City of <b>London</b>	✓	✓			✓
The Corporation of the Town of <b>Markham</b>	✓	✓			✓
The District Municipality of <b>Muskoka</b>	✓	✓	✓		✓
The Regional Municipality of <b>Niagara</b>	✓		✓		✓
The Corporation of <b>Norfolk County</b>	✓				✓
The Corporation of the City of <b>North Bay</b>	✓	✓			✓
The Corporation of the City of <b>Orillia</b>	✓	✓			✓
City of <b>Ottawa</b>	✓				✓
<b>Oxford County</b>	✓		✓		✓
The Regional Municipality of <b>Peel</b> (includes stormwater management works in City of Mississauga only)	✓	✓	✓		✓
<b>Peterborough</b> Utilities Services Inc. (drinking water systems only)	✓				✓

Table 19: Participating Municipal Authorities and Types of Works under the Transfer of Review Program – continued

Municipal Authority Program Partner	Types of Works Reviewed				Municipal Drinking Water Permit & Licence
	A	B	C	D	(MDWP&L)
The Corporation of the Town of <b>Richmond Hill</b>	✓	✓			✓
The Corporation of the City of <b>Sault Ste. Marie</b> (sewage works)	✓				✓
PUC Services Inc. (in <b>Sault Ste. Marie</b> ) (drinking water systems)	✓				✓
The Corporation of the Township of <b>St. Clair</b> (includes watermains and storm & sanitary sewers (no pumping stations))	✓				✓
Corporation of the Town of <b>Tecumseh</b>	✓	✓			✓
The Corporation of the City of <b>Thunder Bay</b>	✓				✓
The Corporation of the City of <b>Timmins</b>	✓				✓
City of <b>Toronto</b>	✓	✓		✓	✓
The Regional Municipality of <b>Waterloo</b>	✓		✓		✓
The City of <b>Windsor</b>	✓				✓
The Regional Municipality of <b>York</b> (excludes works in the Town of Markham and the Town of Richmond Hill)	✓	✓	✓		✓

## Appendix 4.

# Sample Waste Projects and their Qualification for Limited Operational Flexibility

1. The ability to make changes that are routine, with predictable effects that are environmentally insignificant.
  - relocate the waste storage areas for sorted materials (baled cardboard etc.), or
  - move a fence or add a new gate.
2. The ability to make changes to the facilities and infrastructure.
  - construct a larger waste receiving/processing building
  - the applicant would require municipal approvals (building permit, Site Plan).
3. The ability to make changes to the processing operations and install new equipment.
  - replace existing processing equipment such as compactors and balers
  - install new equipment
  - transform from a manual sorting operation to a fully automated sorting facility.
4. The ability to utilize an annual averaging of the amount of waste that is received. This will enable the operator of the waste facility to receive more waste during peak periods to account for seasonal fluctuations in waste generation.
  - The Waste ECA with Limited Operational Flexibility will specify an annual limit to the amount of waste that can be received at the site.
  - e.g., 182,500 tonnes (equivalent to 500 tonnes per day over a year)
  - The ECA will also specify a maximum amount of waste that can be received in a single day.
  - e.g. not to exceed 1000 tonnes of waste received in any one day.
5. The ability to increase the amount of waste that may be stored at the waste disposal site within a predetermined envelope.
  - For example, an owner may choose to initially operate the waste disposal site below the maximum amount and would be permitted to increase the storage amount through the limited operational flexibility.
6. The ability to receive additional categories of municipal waste at the site.
  - For example, an applicant may apply for the flexibility to receive all categories of MSW but may opt to initially receive only IC&I type waste. The Waste ECA with Limited Operational Flexibility would define the rules (i.e., building design, additional odour controls, etc.) to be followed should the owner decide to begin receiving residential waste at the site.
7. Receipt of residential solid municipal waste in an emergency situation.
  - For example, a waste disposal site that is not approved to receive residential waste may be permitted to do so through a condition in the Waste ECA with Limited Operational Flexibility in order to alleviate an emergency situation such as a border closing or labour action.
8. A Waste ECA with will NOT include Limited Operational Flexibility with respect to the following:
  - Changes to the waste disposal site that require the Engineer's Report to be revised
  - That is, alterations not contemplated in the Engineer's Report.
  - The expansion of the physical size of the site
  - That is, the inclusion of adjacent property.
  - Introduction of new waste types
  - For example, hazardous waste and liquid industrial waste or residential or domestic waste, if not previously approved.
  - Introduction of a new waste processing operation that is unrelated to the approved function of the existing approval.
  - For example, a site initially approved as a waste transfer station could not change to an organics composting site or a soil bioremediation facility.
  - Changes to the waste disposal site that are subject to the Environmental Assessment Act.



## Appendix 5.

### Pre-Application Considerations checklist



The purpose of this Pre-Application Considerations checklist is to help you decide whether you should seek a pre-application meeting with the ministry.

The questions are meant to get you thinking about specific steps (in addition to the filing of your Application and paying your fee) that you might need to take on the road to receiving an ECA. Answer **Yes** or **No** to each question. Keep in mind that just because you answer Yes to one or more questions it does not necessarily mean you need to consult with the ministry. For example, there may have already been consultation with the public or with Aboriginal communities in respect of your project as a part of the Environmental Assessment process. Answering Yes to the question may not mean that you need a pre-application meeting with the ministry, as you may have already addressed the issue. Where significant time has passed since the prior consultation and/or new information suggests potential negative impacts to Aboriginal or treaty rights not previously addressed, a meeting with the ministry is advisable. You may leverage prior consultation but MOE evaluates based on the nature of the consultation and the events that have occurred since the consultation.

If you answered **Yes** to a number of the questions and you have not taken any other steps to address issues that potentially may delay our review of your Application – or you do not know how to address the issues raised by the questions – you may find it useful to have a pre-application meeting with the ministry.

If you decide you would like a pre-application meeting you can initiate it by contacting the local district office of the ministry serving the area in which the proposed activity is to be located. For mobile activities contact the district office that serves your head office. To find the appropriate local ministry district office visit the ministry's website:

[www.ene.gov.on.ca/environment/en/about/regionaldistrictoffices/index.htm](http://www.ene.gov.on.ca/environment/en/about/regionaldistrictoffices/index.htm)

## Issues of Public Interest

If there are issues related to a proposal that are of interest to the public, there could be a need for public consultation, for example, including but not limited to:

- under the Environmental Bill of Rights,
- if the Director requires such consultation, or
- if a third-party appeals the director's decision.

Planning for public consultation in advance can reduce delays that can result if public issues are not addressed early on. A pre-application meeting with the ministry may be helpful both in terms of deciding about the need for public consultation and for ideas about options for this consultation. It is recommended that you bring the completed checklist to your Pre-Applications Consideration meeting.

1. Do you hold an approval related to this project, or for a similar project, that was subject to a public hearing?

☐ Yes ☐ No

Appeals, other reviews, or heightened interest from third parties in the past may mean that there is sustained interest in such projects, or in your activity, that may cause delays during the EBR comment period of the review.

2. Do you hold an approval related to this project, or for a similar project, that was subject to an EBR comments?

☐ Yes ☐ No

Appeals, other reviews, or heightened interest from third parties in the past may mean that there is sustained interest in such projects or in the applicant's activity that may cause delays during the EBR comment period of the review.

3. Do you hold an approval related to this project, or for a similar project, that was the subject of a significant amount of Environmental Registry comments in the past?

☐ Yes ☐ No

To find out about past comments you can consult the Environmental Registry. The decision notice provided on the Environmental Registry will include a review of comments received. These notices are kept on the Environmental Registry ([www.ebr.gov.on.ca](http://www.ebr.gov.on.ca)) and can be searched by key word, such as the title of the original EBR posting.

4. Are you aware of any complaints (either made directly to you or to the ministry) about your activities?

☐ Yes ☐ No

The types of interest can range from inquiries from the local community to actual environmental complaints. You should consider whether the interest represents on-going, acute, and/or widespread concern.

## Issues of Public Interest – continued

5. Are you aware of operations in Ontario that are similar to those you are proposing – if so, were public concerns about those operations raised?

☐ Yes ☐ No

If there are, or were, similar operations in Ontario that were the subject of public concern, you may find your current application also of interest from the public.

6. Would the public be concerned about any of the environmental impacts from your proposal?

☐ Yes ☐ No

Aspects of projects that are likely to cause public concern include:

- visible or highly noticeable features like noise, odour, visible particulates;
- emissions that are considered contentious, for example, toxic chemicals, benzene;
- discharges into water bodies, depending on the use and state of the water body;
- proximity to the nearest neighbours, especially in an area of mixed zoning that includes residential.

7. Is your project close to environmentally sensitive areas?

☐ Yes ☐ No

Keep in mind that the environmental sensitivity may depend on your project and the specific emissions. Some examples of environmentally sensitive areas are: the Oak Ridges Moraine, the Niagara Escarpment, and Lake Simcoe, but there may also be local wetland or forested areas that you should consider.

In cases where projects are close to environmentally sensitive areas, environmental issues may take on added significance and mitigation may be needed at numerous stages of project planning, design, and execution. A pre-application meeting with the ministry may be helpful because we may have advice on project design that can help mitigate potential issues.

## First Nations and Métis Community Interest

Certain impacts on the protected rights of First Nation or Métis communities could require consultation with these communities. Where you have identified that there may be interest through the following questions, the ministry may help you determine the need for consultation and provide recommendations on how to proceed. Planning for this in advance can reduce delays associated with:

- an EBR review,
- a director's decision to require such consultation, or
- third-party appeals of the director's decision.

8. Are you aware of concerns from First Nation or Métis communities about your operations, proposed operations, or a similar project in the area?

☐ Yes ☐ No

The types of concerns can range from interested inquiries to environmental complaints, and even to land use concerns. You should consider whether the interest represents on-going, acute and/or widespread concern.

9. Is your project/activity occurring on Crown land, or is it close to a water body, or might it change access to either?

☐ Yes ☐ No

10. Is the project/activity located in an open or forested area where hunting or trapping could take place?

☐ Yes ☐ No

11. Does the project/activity involve the clearing of forested land?

☐ Yes ☐ No

12. Is the project located away from developed, urban areas?

☐ Yes ☐ No

13. Is your project/activity close to, or adjacent to, an existing reserve?

☐ Yes ☐ No

Note: If you answer yes to Questions 8-13 you must come in for a pre application meeting.

## Compliance Issues

In deciding whether to grant an ECA, the ministry considers whether the applicant has open or unresolved non-compliance issues, or a history of non-compliance. To eliminate possible delay in the review of your Application, it is a good idea to identify and address any such issues early on.

14. Are there any non-compliance issues that you have not resolved (such as issues that may have been identified in violation notices, compliance letters, orders, tickets, environmental penalties, administrative penalties, inspection reports, etc.)?

☐ Yes ☐ No

Non-compliance issues will be taken into account in the review and should be addressed prior to the application rather than at the review stage. These issues may have been identified in violation notices, compliance letters, orders, tickets, environmental penalties, administrative penalties, etc.

While the following are non-compliance issues and would be examined in the review process, they are of lesser concern because you would have already spoken to the ministry about this:

- Abatement projects – the applicant may be non-compliant, but is already working with the district to come into compliance (note that these may already have stakeholder issues).
- Orders to obtain or apply for an approval – this information will be collected in the application form.

## Technical Project Issues (Including new and rare issues not currently covered by ministry guidance or policy.)

Though it is your responsibility to review and understand the approval process and published guidance, new issues, technologies, or projects are being developed all the time that may not be covered under the available guidance. Also, the Application may not be flexible enough to accommodate unusual scenarios. In such cases it is important for you to inform the ministry as early as possible so that a collaborative approach can be taken.

### 15. Does your project use innovative, new technology or processes?

☐ Yes ☐ No

Characteristics of new technology may not fit easily into the data requirements of known technologies. In such cases it may be necessary to contact the ministry before applying.

### 16. Is the type of project you are proposing not discussed in current ministry published guidance?

☐ Yes ☐ No

Though there is a great deal of guidance on the ministry website, in some cases there is a clear policy or guidance gap and compliance requirements are not clear. In such cases it may be necessary to contact the ministry before applying.

### 17. Are you a municipal sewage works seeking approval with only preliminary drawings?

☐ Yes ☐ No

The Ministry has allowed for such a process but, given the preliminary nature, it may be necessary to contact the Ministry regarding the feasibility of such an approval.



## Other Issues

A Pre-Application meeting with the ministry also presents an opportunity to discuss issues other than policy, public, or First Nations or Métis community consultation. The types of issues for which a Pre-Application meeting with the Ministry might be useful are considered here.

### 18. Is your application related to a greenfield project?

☐ Yes ☐ No

Though not all greenfield projects need a Pre-Application meeting with the ministry, it might be useful if:

- your greenfield project is large,
- it is a total redevelopment of an existing facility, or
- a major expansion of an existing facility.

## Copies of Your Application

Submit one (1) paper copy of the complete application (unless your application is a Transfer of Review), one (1) electronic copy of the complete application and the fee to the Director, Environmental Approvals Access and Service Integration Branch at the address provided at the beginning of this document.

You must also send a copy of the application without the fee to the local Ministry District Office that has jurisdiction over the area where the facilities are located. To locate the appropriate local ministry district/area office, visit the ministry website at: [www.ene.gov.on.ca/environment/en/about/regional\\_district\\_offices/index.htm](http://www.ene.gov.on.ca/environment/en/about/regional_district_offices/index.htm).

For Waste Disposal Sites you must also send a copy of the application without the fee to the Clerk's office of the local municipality (both upper and lower tier) in which the facility/proposed facility is located unless the application is for a revocation or an amendment that is environmentally insignificant or the applicant is a municipality.

Transfer of Review applications must be submitted with two (2) copies of the completed application and the fee to the designated municipal authority, not the ministry.



[ontario.ca/environment](http://ontario.ca/environment)